

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

U.S. Patent No. 9,135,737

PATENT OWNER'S SUR-REPLY TO PETITIONER'S REPLY

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I. INTRODUCTION

The Board should uphold the patentability of the challenged claims of the '737 Patent for at least the three reasons established in Patent Owner's Response ("POR") (Paper 16). Petitioner's Reply does not overcome the deficiencies in the Petition.

First, Petitioner's Heller-Quam combination (Ground 1) fails to teach limitation [1.5] and corresponding limitations [16.3] and [26.3], as well as dependent claims 9 and 10. Petitioner's Ground 1 arguments significantly overreach in alleging that the entirety of limitation [1.5] should not be entitled to patentable weight based on the Board's prior decision in IPR2016-00592 ("the Xactware IPR"). Realizing its error, Petitioner modifies Ground 1 in its Reply to newly assert that the Heller-Quam combination produces a roof estimate report. Petitioner's new argument fails because the Heller-Quam combination does not teach "generating and outputting a roof estimate report using a report generation engine" as claimed.

Second, Petitioner's Heller-Quam-Deaton combination (Ground 2) fails to teach limitations [1.5], [16.3], and [26.3], notwithstanding Petitioner's attempt to modify Ground 2 in its Reply. None of these references teach "generating and outputting a roof estimate report using a report generation engine" as claimed, and there is no motivation to modify the Heller-Quam combination with Deaton.

Third, Patent Owner has shown that the claims are non-obvious based on compelling evidence of commercial success and industry praise for Patent Owner's Twister and Render House products, which embody the challenged claims. Patent Owner has shown extensive evidence of nexus because the commercial success and industry praise evidence are the direct result of the unique characteristics of the challenged claims. The Federal Circuit affirmed the Board's finding in the Xactware IPR that the claims are non-obvious based on Patent Owner's extensive evidence of commercial success and industry praise. Petitioner fails in its attempts to attribute Patent Owner's commercial success and industry praise to other factors.

II. CLAIM CONSTRUCTION

All terms in the challenged claims of the '737 Patent should be construed according to their plain and ordinary meaning as would be understood by a POSITA in light of the specification of the '737 Patent. EX2032, ¶49.

As discussed below, Petitioner's constructions for the following terms are incorrect. EX2032, ¶50.

**A. “Generating and outputting a roof estimate report...”
(independent claims 1, 16, and 26).¹**

Petitioner incorrectly argues that *the entirety* of limitations [1.5], [16.3], and [26.3] lack patentable weight based on its misinterpretation of the Final Written Decision in the Xactware IPR (“the ’592 IPR Final Written Decision”) (EX1010). Based on its erroneous construction, Petitioner incorrectly argued that “a showing of ‘generating and displaying any graphical or textual information’ is sufficient to meet [limitation [1.5]].” Petition, 34; POR, 11-15.

Limitation [1.5]² recites the following features (with indicators **(a)** and **(b)** added) (*see* POR, 13, 25, 28):

[1.5] (a) generating and outputting a roof estimate report using a report generation engine,

(b) wherein the generated roof estimate report is provided for repair and/or constructing the roof structure of the building.

Contrary to Petitioner’s argument, the Board did not find in the ’592 IPR Final Written Decision that the entirety of limitation [1.5] lacks patentable weight.

¹ Unless indicated otherwise, all emphasis has been added.

² Patent Owner refers predominantly to [1.5], and its arguments apply equally to [16.3] and [26.3]. EX2016, 1-4 (comparison of independent claims).

POR, 11-15. Specifically, the Board found that “the *claimed content of the information* is not entitled to weight in the patentability analysis,” and that “*the detailed requirements as to the contents of the roof estimate report* are not entitled to patentable weight.” EX1010, 18. Limitations [1.5(a)] and [1.5(b)] are not directed to these “content” features and are therefore entitled to patentable weight. POR, 11-15; EX1010, 18; EX2032, ¶¶58, 62-63.

Petitioner addresses its misreading of the '592 IPR Final Written Decision by arguing that it “applied the Board’s prior interpretation in the Petition,” and “mapped the prior art to recitations of Limitation [1.5] not directed to content.” Reply, 1-2. However, Petitioner did not show that limitations [1.5(a)] and [1.5(b)] are taught by the prior art. *See* Sections III.A and III.B below.

Petitioner also incorrectly argues that Patent Owner “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.’” Reply, 2. Petitioner is requiring Patent Owner to disprove something the Board did *not* state in the '592 IPR Final Written Decision—that limitation [1.5(b)] is *not* entitled to patentable weight. The Board did not make such a finding.

Petitioner relies on an entirely new argument in its Reply that the Board should disregard limitation [1.5(b)] because it does not “recite[] anything more

than an intended use of the report reflected by roof measurement *content*.” Reply, 3 (emphasis original) (citing EX1041, ¶11); *see id.*, 3 n. 2 (similar argument). The Board should decline to consider this improper new argument that was never raised or even suggested in the Petition, and is not responsive to any argument in the POR. *See* 37 C.F.R. § 42.23(b) (“A reply may only respond to arguments raised in the corresponding... patent owner response.”); Consolidated Trial Practice Guide (Nov. 2019) at 74 (“‘Respond,’ in the context of 37 C.F.R. § 42.23(b), does not mean proceed in a new direction with a new approach as compared to the positions taken in a prior filing.”), 45 (petitioner “cannot raise new claim construction issues that were not previously raised in its petition.”).

The Petition and Dr. Forsyth’s original Declaration (EX1003) do not suggest that limitation [1.5(b)] “recites anything more than intended use,” as Petitioner now improperly argues. Reply, 3; EX1041, ¶11. The Board should disregard this improper new argument. *See Intelligent Bio-Systems v. Illumina Cambridge*, 821 F.3d, 1359, 1369-70 (Fed. Cir. 2016) (affirming Board’s decision declining to consider new reply arguments); *Ariosa Diagnostics v. Verinata Health, Inc.*, 805 F.3d 1359, 1368 (Fed. Cir. 2015) (the Board may disregard new reply arguments “when a [r]eply...crosses the line from the responsive to the new.”).

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

Patent Owner showed that claim 9 should be construed as transmitting the roof measurement information outside the roof estimate report system (e.g., RES in Figure 8), such as to “third-party systems that generate roof estimate reports based on the provided information.” EX1001, 17:12-20; POR, 18, 15-18. This plain and ordinary meaning of claim 9 is based on how a POSITA would understand claim 9 in light of the specification (EX2032, ¶¶66-69, 47), and does not import unrecited limitations as Petitioner incorrectly contends. Reply, 5.

Petitioner argues that Patent Owner “disregards the ’737 patent’s description related to transmission of ‘Roof Estimation System 810’ *content* to other components of the ‘computing system.’” Reply, 4 (emphasis original) (citing EX1001, 16:13-17). Petitioner misreads the cited portion, which provides that “some portion of the contents...of the RES 810 may be stored on and/or transmitted over the other computer-readable media 805.” EX1001, 16:13-17. There is no correspondence between “contents” and “roof measurement information” as Petitioner incorrectly alleges. Reply, 4. Petitioner and Dr. Forsyth cite to EX1001, 16:20-23, 16:29-36, 16:37-17:21, but none of these cited portions support their argument that “contents” “provid[es] roof measurement information.” Reply, 4 (citing EX1014, ¶¶13-16).

Petitioner's argument about media 805 in Figure 8 not being "within" the RES 810 misses the point. Reply, 4. Dr. Bajaj cited media 805 as an example of a computer-readable medium and showed that "[a] POSITA would not reasonably construe...transmitting the roof measurement information to another computer-readable medium...within the roof estimate system because that is inconsistent with the specification of the '737 Patent." EX2023, ¶69; POR, 18. Petitioner did not contest that showing.

C. Collateral Estoppel Does Not Preclude Patent Owner from Contesting Petitioner's Incorrect Claim Constructions.

Patent Owner showed that Petitioner is legally incorrect to argue that collateral estoppel prevents Patent Owner from contesting Petitioner's erroneous construction of limitations [1.5], [16.3], and [26.3]. POR, 18-21. Petitioner's only argument in favor of collateral estoppel is that the Xactware IPR parties "disputed" the interpretation of limitation [1.5]. Reply, 5. Petitioner has cited no authority to support is erroneous contention. POR, 18-21; Reply, 5 (only attorney argument).

III. PETITIONER'S GROUNDS 1 AND 2 FAIL

Petitioner has failed to meet its burden to prove that the challenged claims are unpatentable under Ground 1 or Ground 2. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (Petitioner has the burden to prove unpatentability and that burden never shifts to Patent Owner).

A. The Heller-Quam Combination Does Not Teach Limitation [1.5].

The Heller-Quam combination fails to teach limitations [1.5(a)] and [1.5(b)]:

[1.5] (a) generating and outputting a roof estimate report using a report generation engine,

(b) wherein the generated roof estimate report is provided for repair and/or constructing the roof structure of the building.

POR, 25-27.

Petitioner argues that “[t]he Petition explicitly indicated that ‘the combined system of Heller and Quam produces a roof estimate report’ (Pet., 21).” Reply, 6.

The Petition states: “[a]s described in greater detail below (*see* [1.5], *infra*), the combined system of Heller and Quam produces a roof estimate report.” Petition, 21. But Petitioner’s analysis of limitation [1.5] in Ground 1 never addresses how Heller or Quam allegedly “produces a roof estimate report.” Petition, 33-35.

Instead, Petitioner relies on its erroneous contention that the entirety of limitation [1.5] is not entitled to any patentable weight, and alleges that “a showing of ‘generating and displaying any graphical or textual information’ is sufficient to meet the claim.” Petition, 34 (citing EX1010, 18). The Petition’s entire analysis of limitation [1.5] never addresses how Heller or Quam allegedly teach limitations [1.5(a)] and [1.5(b)]. POR, 26-27.

Recognizing the deficiencies of the Petition, Petitioner newly argues in the Reply that “Heller/Quam discloses generating and outputting particular roof data in graphical and textual form through Quam’s description of its RCDE system.” Reply, 6 (citing Petition, 33-34; EX1014, ¶¶4, 17-19). The Petition and Dr. Forsyth’s original Declaration (EX1003) never made any arguments, nor cited to any teachings in Heller or Quam, about “generating and outputting particular roof data,” as Petitioner newly alleges. Similarly, Petitioner and Dr. Forsyth’s original Declaration never alleged that “a POSITA would have understood that the combined [Heller-Quam] 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).” Reply, 6 (citing EX1014, ¶18). Tellingly, Petitioner does not cite the Petition for its argument about what “a POSITA would have understood” from the Heller-Quam system. Reply, 6. Petitioner relies on portions of Heller (EX1004, 1) and Quam (EX1005, 11) not cited in its analysis of limitation [1.5] to newly allege that Quam “articulates...the presentation of roof data generated and outputted from manipulating and altering roof and associated environment information.” Reply, 6. The Board should disregard these improper new arguments not raised in the Petition and not responsive to arguments in the POR. *Ariosa Diagnostics*, 805 F.3d at 1367-68

(affirming Board's refusal to consider new reply arguments citing new portions of prior-art reference).

Even if the Board considers these improper new arguments (which it should not), Quam's alleged "roof data" is not a "roof estimate report" that is generated and output, and there is no teaching of a "report generation engine" in Heller or Quam, as recited in [1.5(a)].

Petitioner argues that Patent Owner's "failure to identify any meaningful gap in the Petition's Ground 1 analysis...is not remedied by its dissection of Limitation [1.5] into 'features (a)' and '(b).'" Reply, 7. Petitioner is improperly placing the burden on Patent Owner to identify "meaningful gaps," despite Petitioner having the burden to show that the Heller-Quam combination teaches limitations [1.5(a)] and [1.5(b)], which it has failed to do. *Dynamic Drinkware*, 800 F.3d at 1378.

B. The Heller-Quam-Deaton Combination in Ground 2 Does Not Teach Limitation [1.5].

The Heller-Quam-Deaton combination fails to teach at least limitation [1.5(a)]. POR, 28-30 (citing EX2032, ¶¶150-158).

1. The Heller-Quam-Deaton Combination Does Not Teach Limitation [1.5(a)].

Petitioner relies on Deaton "to the extent" limitation [1.5] "is found to be entitled to patentable weight." Petition, 53. However, like Heller and Quam, Deaton fails to disclose "generating and outputting a roof estimate report using a

report generation engine,” as recited in limitation [1.5(a)]. POR, 28-30 (citing EX2032, ¶¶150-158).

Relying on Deaton's paragraph 10, Petitioner alleges that “Deaton describes ‘a roof inspection system’ that generates and outputs various reports.” Petition, 53 (citing EX1006, ¶10). However, there is no disclosure of any reports in Deaton's paragraph 10. POR, 29-30 (citing EX2032, ¶¶153-156). Petitioner incorrectly alleges that Patent Owner “focus[es] myopically” on Deaton's ¶10 and “ignor[es] the Petition's discussion of Deaton's ‘project report.’” Reply, 8. Patent Owner addressed Deaton's “project report” on pages 32-35 of the Response. Further, Deaton's “project report” cannot correspond to the claimed “roof estimate report” because Deaton does not teach that the “project report” (or any report for that matter) is “generat[ed] and output[ed]...using a report generation engine,” as recited in limitation [1.5(a)]. POR, 29-30 (citing EX2032, ¶¶153-156). Petitioner does not attribute any teaching of Deaton to a “report generation engine.” Petition, 53; POR, 29-30 (citing EX2032, ¶¶154-156). Consequently, Petitioner's argument that “Deaton's disclosure of a roof estimate report, through its description of a ‘project report,’...remains unaddressed by the POR and uncontroverted” lacks merit. Reply, 8.

2. There is Insufficient Motivation to Combine Deaton with the Heller-Quam Combination.

A POSITA would not have been motivated to combine Deaton's system of conducting on-site physical measurements and inspections of a roof under investigation to generate a "roof estimate report" with Heller-Quam's image-based 3D modeling technique. POR, 30-35 (citing EX2032, ¶¶160-172).

Petitioner incorrectly argues that Patent Owner "mischaracterizes the combination" by requiring "bodily incorporation of 'on-site, physical inspection of the roof' to generate reports." Reply, 9. Contrary to Petitioner's assertion, Patent Owner did not argue for bodily incorporation of Deaton into the Heller-Quam combination. Rather, Patent Owner showed why a POSITA would not have been motivated to modify the Heller-Quam system, which is directed to creating a 3D model from images, to use Deaton's project report, which is created from the on-site physical inspection of an infrastructure under investigation. POR, 31-32 (citing EX2032, ¶¶163-164).

The Petition alleges that "the combined system of Heller and Quam is modified to produce a roof estimate report, as taught by Deaton, based on the site models described in Heller and Quam." Petition, 50. This proposed combination is not supportable because neither Heller nor Quam generate or output a roof estimate report based on their 3D models. POR, 30-31 (citing EX2032, ¶¶161-162). A

POSITA would not have been motivated to modify the Heller-Quam system to produce a roof estimate report, as Petitioner alleges, because Deaton discloses that its “project report” is created from “roof measurement information” that is collected from the physical inspection of a roof on-site. POR, 31 (citing EX2032, ¶163); EX1006, ¶¶10, 107.

Petitioner also makes the baseless argument that Patent Owner “fails to cite any reason dictating the use of an ‘on-site, physical inspection of the roof’ ...to generate a project report or other reports described by Deaton.” Reply, 10. Patent Owner cited the express reason disclosed in Deaton: the “project report” is created ***“in accordance with the conditions identified in the assessment report,”*** which “include[s] a summary of the inspected infrastructure and a listing of the deficiencies identified during inspection data collection.” EX1006, ¶¶106-107 (“assessment report” includes information about “inspected infrastructure,” and “project report” “links the inspection data” to “the conditions identified in the assessment report”), 10 (“collecting roof inspection information” from on-site inspection of “remote location”); POR, 32 (citing EX2032, ¶164). Deaton’s express disclosure contradicts the basis for Petitioner’s proposed modification. Contrary to Petitioner’s argument (Petition, 53-54), there is no disclosure or suggestion in Deaton that the “project report” (or “assessment report”) is in any way generated based on a 3D model, or “would operate in the same manner

regardless of how the...three-dimensional model was originally generated.” Pet., 53-54; POR, 33-34 (citing EX2032, ¶¶164, 168-169). There is no support for Petitioner’s assertion that Deaton’s “project report” could be created “based on the site models described in Heller and Quam.” Petition, 50; POR, 33 (citing EX2032, ¶¶167-168).

Therefore, Patent Owner is not, as Petitioner alleges, suggesting that a POSITA must “follow blindly the teaching of one prior art reference over the other without the exercise of independent judgment.” Reply, 10. Patent Owner established why a POSITA would not have been motivated to make Petitioner’s proposed combination because the very basis for the combination (using Deaton’s techniques for generating a roof estimate report based on a 3D model) has no merit and is contradicted by the express disclosure of Deaton. POR, 33-34 (citing EX2032, ¶¶166-168).

Apparently realizing that its Heller-Quam-Deaton combination lacks merit, Petitioner proposed new modifications in its Reply, citing new portions of Deaton (Reply, 10 (citing EX1006, ¶¶3-4; EX1041, ¶26)) to argue that modifying Heller-Quam with Deaton would further “Deaton’s explicitly described objectives of reducing ‘expensive and labor intensive operations’ associated with” then-conventional techniques of using “pen and paper” to make measurements and generate reports “related to the repair and/or replacement of infrastructure at a

remote location.” Reply, 10; EX1006, ¶¶3-4. Further, Petitioner newly argues in its Reply that a POSITA would have been motivated to use Deaton’s “alternative tools” for “obtaining infrastructure information and creating graphical models,” including “satellite-based, position sensing devices.”). Reply, 10-11 (citing EX1006, ¶70).

In addition to being improper new arguments that the Board should disregard because they rely on evidence not raised in the Petition, these arguments lack merit. *Ariosa Diagnostics*, 805 F.3d at 1367-68 (improper new reply argument relying on previously uncited portions of prior-art reference). First, Petitioner is still relying on Deaton, which unequivocally requires physical inspection to generate a “project report” (EX1006, ¶¶10, 106-107), to modify the combined Heller-Quam system that does not generate or output a report and uses 3D models created from images. POR, 32-33 (citing EX2032, ¶¶164-168). Second, Petitioner’s proposed modification to the combined Heller-Quam system lacks merit when Petitioner relies on Deaton’s “project report” in an attempt to teach the claimed “roof estimate report” because Deaton does not disclose or suggest that its “project report” is based on any of the “alternative tools” that Petitioner now improperly relies upon.

Petitioner further modifies the Petition by adding a new motivation to combine rationale of promoting efficiency. Reply, 11. Specifically, Petitioner

argues that a POSITA would have recognized that generating and outputting a “project report” using the “imaging and modeling system described by Heller-Quam...would have enhanced the functionality of the Heller-Quam system by generating and reporting additional information in an efficient manner.” Reply, 11. Petitioner’s citation to pages 51-52 of the Petition does not support Petitioner’s new argument. The Board should disregard this improper new argument about efficiency, which has no basis in Heller, Quam, or Deaton. None of the asserted references support this new modification, and Dr. Forsyth’s testimony in support of this new modification (EX1024, ¶28) is entirely conclusory and, therefore, entitled to no weight. *See* 37 C.F.R. § 42.65(a) (expert testimony not supported by evidence is entitled to little or no weight); *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 16 (Aug. 24, 2022) (precedential) (declaration entitled to little weight when it contains a “restatement of the assertion being supported, without any supporting evidence or technical reasoning.”).

C. Grounds 1 and 2 Fail for Independent Claims 16 and 26.

Petitioner relies exclusively on its analysis of claim 1 for independent claims 16 and 26. Petition, 44 (claim 16 in Ground 1), 48-49 (claim 26 in Ground 1), 54-55 (claims 16 and 26 in Ground 2). Patent Owner showed why Petitioner’s analysis of claim 1 fails to address unique limitations recited in claims 16 and 26. POR, 65-84 (citing EX2032, ¶¶97-130).

Petitioner presents new arguments for claims 16 and 26 because the Petition is deficient. Reply, 23-26. Petitioner's arguments all fail.

First, the Board should decline to consider the new arguments that Petitioner raises for the first time in its Reply with respect to claims 16 and 26. Petitioner chose to shortcut its analysis of claims 16 and 26 by relying exclusively on its analysis of claim 1, despite the clear differences between the claims. *See* EX2016, 1-4 (comparison of claim 1 to claims 16 and 26). Petitioner should not be permitted to rely on new evidence and arguments only after Patent Owner identifies why Petitioner's showing for claims 16 and 26 was deficient. Petitioner failed to meet its statutory burden under 35 U.S.C. § 312(a)(3) to show with particularity what evidence supported Petitioner's challenges to claims 16 and 26.

Second, even if the Board considers Petitioner's new arguments for claims 16 and 26 (which it should not), Petitioner's new arguments do not particularly identify the evidence that Petitioner cites for claims 16 and 26, as required by 35 U.S.C. § 312(a)(3). *See also* 37 C.F.R. § 42.104(b)(4) ("The petition must specify where each element of the claim is found in the prior art patents or printed publications relied upon."). For example, when addressing limitations [16.0] and [26.0], Petitioner cites ten pages of the Petition ("Pet., 12-16, 19-22") in an attempt to cure its deficient showing. Reply, 24 ([16.0]), 25 ([26.0]). It is not Patent Owner or the Board's burden to sift through ten pages of the Petition in an attempt to

piece together which portions of the asserted reference(s) allegedly correspond to the limitations of claims 16 and 26.

Third, Petitioner's arguments that the preambles of claims 16 and 26 are not limiting lack merit. The preambles both provide antecedent basis for limitations in the bodies of claims 16 and 26. POR, 67 ("a building having a roof" in limitation [16.0] provides antecedent basis for "roof of the building" in limitations [16.1] and [16.3]), 75 ("a computer system" in limitation [26.0] provides antecedent basis for "the computer system" in limitations [26.1] and [26.2]); EX2032, ¶¶100, 118. The preambles of claims 16 and 26 are limiting because they "recite[] essential structure or steps" and are "necessary to give life, meaning, and vitality to the claim[s]." *Shoes by Firebug LLC v. Stride Rite Children's Grp., LLC*, 962 F.3d 1362, 1367 (Fed. Cir. 2020); *Eaton Corp. v. Rockwell Int'l. Corp.*, 323 F.3d 1332, 1339 (Fed. Cir. 2003) (preamble is limiting "[w]hen limitations in the body of the claim rely upon and derive antecedent basis from the preamble.").

The Petition's analysis fails to show that the limitations of claims 16 and 26 are taught by the asserted prior art. POR, 65-84 (citing EX2032, ¶¶97-130).

D. The Heller-Quam Combination Does Not Render Claim 9 Unpatentable.

As discussed in Section II.B above, the Board should reject Petitioner's proposed construction of claim 9. Under the proper construction, the Heller-Quam

combination does not teach “roof measurement information,” or “transmitting roof measurement information,” as recited in claim 9. POR, 84-88. Petitioner’s reply arguments fail for multiple reasons.

First, Petitioner incorrectly argues that Patent Owner is importing limitations from the disclosed embodiments. Reply, 27 (arguing that the POR “limits this term based on examples recited at col. 2 lines 55-58 of the ’737 patent,” and “imports limitations in a second manner to require ‘linking precise measurements to its 3D models.’”). Patent Owner cited examples of “roof measurement information” in the specification, but did not argue that the claimed “roof measurement information” is limited to these examples. POR, 85-87.

Second, Patent Owner showed that Heller’s “object adjustment events” have no relationship to “roof measurement information” because nothing is being measured. POR, 85 (citing EX2032, ¶136). Tellingly, Petitioner abandoned its reliance on “object adjustment events” in the Reply.

Third, Petitioner newly relies on adjusting the “slope of the roof,” which Petitioner alleges to correspond to “describing roof measurement information provided by pitches of roof sections.” Reply, 27 (citing EX1041, ¶¶42-44). This is an improper new reply argument that should not be considered. Petitioner did not rely on Heller’s alleged teaching of adjusting slopes for claim 9. Petition, 38-39.

Fourth, Petitioner has not shown that changing a line drawing or adjusting the slope amounts to “measurement information about a roof, as the name “roof measurement information” requires. EX2032, ¶¶136-137 (the Heller-Quam combination does not link line drawings or mouse movements to a measurement (or reference) scale to constitute “roof measurement information”); Reply, 27-28 (citing EX1041, ¶45).

E. The Heller-Quam Combination Does Not Render Claim 10 Unpatentable.

The Heller-Quam combination does not teach “registering, based on the received indication of the point, the aerial image to a reference grid corresponding to a three-dimensional model of the roof,” as recited in [10.2]. POR, 88-90 (citing EX2032, ¶¶142-148).

Petitioner rehashes its scattershot argument that a POSITA would have understood Quam’s “world coordinate system” to be a “reference grid.” Reply, 28 (citing EX1005, 1, 5, 8, Fig. 4; EX1041, ¶46; EX1003, ¶76). This argument is wrong because the “world coordinate system” is not shown to correspond to a 3D model of the roof as required by [10.2]. POR, 89-90 (citing EX2032, ¶147).

IV. SECONDARY CONSIDERATIONS OF NON-OBVIOUSNESS

Patent Owner presented extensive and compelling evidence of non-obviousness based on the commercial success of and industry praise for Patent

Owner's Twister and Render House products that embody the challenged claims. POR, 36-63 (citing EX2032, ¶¶174-179).

Dr. Bajaj submitted detailed claim charts showing how each of the challenged claims is embodied by the Twister and Render House products. EX2032, ¶179 (pages 113-173); POR, 38-57 (showing challenged claims are embodied by Twister and Render House products).

In the Xactware IPR, the Board found that Patent Owner presented “extensive evidence” indicating that the “Twister and Render House products are coextensive with the challenged claims, and that the commercial success of and industry praise for these products confirmed that the challenged claims are non-obvious.” EX1010, 31, 32-33, 34. In the Xactware IPR, Patent Owner provided “extensive evidence of nexus” between the evidence of commercial success and industry praise and the challenged claims. EX1010, 27, 33, 34; EX2040, 49-71 (citing EX2031, pp. 41-100). The Federal Circuit affirmed the Board's finding of non-obviousness based on Patent Owner's secondary considerations evidence. EX1016, 2.

In this IPR proceeding, Patent Owner presents the same “decisive” and “extensive” evidence the Board relied on in the Xactware IPR. The Board should similarly find in this IPR proceeding that the challenged claims are non-obvious based on this evidence. EX2032, ¶¶174-176.

A. There is a Presumption of Nexus.

Patent Owner is entitled to a presumption of nexus between the secondary considerations evidence and the challenged claims because Patent Owner's Twister and Render House products are the invention disclosed and claimed in the '737 Patent. *PPC Broadband, Inc. v. Corning Optical Communications RF, LLC*, 815 F.3d 734, 747 (Fed. Cir. 2016).

Petitioner argues that the Twister and Render House products are not coextensive with the challenged claims because "these products include significant unclaimed features not covered by the '737 claims." Reply, 12, 13 (Petitioner arguing that Twister and Render House include "critical" features not recited in the '737 claims). Petitioner is wrong for two reasons. First, the Federal Circuit clarified that to establish a presumption of nexus, "the patentee [must] demonstrate that the product is essentially the claimed invention." *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1374 (Fed. Cir. 2019). Patent Owner has done that by showing how the Twister and Render House products embody the challenged claims. EX2032, ¶179 (Dr. Bajaj's claim charts across pages 113-173 showing how challenged claims are embodied by Twister and Render House); POR, 38-57 (similar showing).

Petitioner argues that there cannot be a presumption of nexus because Patent Owner previously argued in IPR2016-00590 that the Twister and Render House

products embody some claims of U.S. Patent 8,818,770, including dependent claims 10 and 11 of the '770 patent. Reply, 13 (citing EX1042, 59-61; EX1043, 59-82). Petitioner identifies these dependent claims as “critical” features of Twister and Render House, but Petitioner’s argument cites no evidence other than Dr. Forsyth’s conclusory testimony (Reply, 13 (citing EX1041, ¶¶29-30)) to allege that dependent claims 10 and 11 of the '770 patent recite “critical” features of Twister and Render House. Patent Owner has shown that the Twister and Render House products are “essentially the same claimed invention,” and Petitioner’s attempts to argue otherwise do not alter that conclusion. *Fox Factory*, 944 F.3d at 1374.

Petitioner makes several other flawed arguments that the Twister and Render House product manuals identify other features not recited in the challenged claims, and that Dr. Bajaj did not review the “full scope” of Twister and Render House. Reply, 14-16. These arguments each fail because Petitioner did not dispute Dr. Bajaj’s extensive showing that the Twister and Render House products embody the challenged claims.

Thus, Patent Owner is entitled to a presumption of nexus. “[P]resuming nexus is appropriate when the patentee shows that the asserted objective evidence is tied to a specific product and that product embodies the claimed features, and is coextensive with them.” *Fox Factory*, 944 Fed. Cir. at 1373.

B. Patent Owner Has Proven a Nexus Between the Evidence of Commercial Success and Industry Praise and the Challenged Claims.

Patent Owner has shown that the compelling evidence of 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. Patent Owner showed that its Twister and Render House products generated accurate roof estimate reports faster and at less expense than previous solutions, and those reports provided more consistently accurate roof measurements than could be achieved using older methods. POR, 57-58 (citing EX1019; EX1020; EX1010, 30 (citing EX1020, 1; EX1029, 8)). Patent Owner’s sales information confirms an exponential growth in revenue based on the sale of reports generated by Twister and Render House. POR, 58-60 (Patent Owner’s revenue increased *more than* [REDACTED] from [REDACTED] to [REDACTED] from sales of reports using Twister and Render House) (citing EX2012, 3; EX2013, 7; EX2014, 6; EX2015, 12; EX2011 (confirming revenue data reflects sales of reports created using Twister and Render House)). Patent Owner’s commercial success is the direct result of the unique characteristics of the challenged claims, including the accuracy of the reports generated by Twister and Render House, as achieved by limitations [1.5], [16.3], and [26.3]. EX2032, pp. 121-126, 148-153, 165-170 (Twister and Render House embody limitations [1.5], [16.3] and [26.3]).

Patent Owner also showed that there was significant industry praise for its roof reports created by Twister and Render House, and that the industry praise evidence is the direct result of the unique characteristics of the challenged claims. POR, 61-63 (citing EX1026, 1 (“Having an Eagle View report has become an industry accepted standard.”); EX1028 (describing Patent Owner’s reports as “consistent, accurate measurements every time”); EX1025, 1-2; EX2026; EX1027, 1-2; EX2032, ¶18; EX2010, 1; EX1029, 12; EX1023, 14, 16-17).

Therefore, Patent Owner has shown that there is a nexus between the commercial success and industry praise evidence and the challenged claims. *Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324, 1332 (Fed. Cir. 2019) (“[T]he evidence of secondary considerations must have a ‘nexus’ to the claims.”).

Petitioner attempts to attribute Patent Owner’s resounding commercial success and industry praise to factors other than Twister and Render House. Reply, 15-22. Petitioner’s arguments are nothing but speculation and are contradicted by the record evidence. For example, Petitioner theorizes that the improved accuracy of the reports generated by Twister and Render House products are due to “high-resolution aerial photography and photogrammetry techniques” and improved “image resolution,” rather than accuracy of the roof estimate reports that is achieved by limitations [1.5], [16.3], and [26.3] of the challenged claims. Reply, 15-17. Grasping at straws, Petitioner cites to Mr. Long responding to a

hypothetical deposition question that “poor quality aerial images” “potentially could” affect the accuracy of the measurements in the report. Reply, 17 (citing EX1054, 26:13-27:9). Petitioner’s reliance on this testimony is misplaced because it does not show that the accuracy of the reports is the result of features other than limitations [1.5], [16.3], and [26.3] of the challenged claims.

Petitioner speculates that Patent Owner’s exponential growth in revenue is attributable to other factors such as expanded growth in geographic coverage, marketing, Patent Owner’s development of customer-based software applications (e.g., mobile phone applications), market-based pricing adjustments, and Patent Owner’s merger with Pictometry. Reply, 18-21. This baseless speculation fails to rebut the record evidence provided in the Response (POR, 57-60) showing that Patent Owner’s commercial success is directly tied to the roof measurement reports generated by the Twister and Render House products that embody the challenged claims.

Petitioner theorizes that the compelling industry praise for Patent Owner’s roof measurement reports are attributable to other factors such as Patent Owner’s “technology” generally and that the customer surveys showing industry praise do not praise unique features of the challenged claims. Reply, 21-22. These unfounded arguments lack merit because Patent Owner showed extensive industry praise for the roof measurement reports generated by Twister and Render House,

which embody the challenged claims. POR, 61-63 (citing EX1025, 2; EX2026; EX1027, 1-2; EX1028; EX2010, 1; EX1029, 12; EX1023, 14, 16-17).

C. Claim 9 is Embodied by Twister and Render House

Dr. Bajaj showed that Twister and Render House embody claim 9. EX2032, pp. 132-134; POR, 47. Petitioner implies that Dr. Bajaj did not understand what features of Twister and Render House are embodied in claim 9. Reply, 23 (citing EX1044, 38:6-39:15, 45:11-15). Contrary to Petitioner's mischaracterization, Dr. Bajaj testified that he did not recall "every single detail" of the demonstration provided by Patent Owner's engineers. Dr. Bajaj testified how Twister and Render House operate based on his evaluation of the software, including embodying the features of claim 9. EX1044, 38:1-46:16.

V. CONCLUSION

The challenged claims are patentable.

Respectfully submitted,

Dated: July 11, 2023

/Kyle L. Howard/
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Lead Counsel for Patent Owner

PATENT OWNER'S EXHIBIT LIST

EX2001	Reserved
EX2002	Reserved
EX2003	Complaint, <i>Eagle View Technologies, Inc. and Pictometry International Corp. v. Nearmap US, Inc.</i> , No. 2:21-cv-00283, ECF No. 2 (D. Utah May 4, 2021) (Oberg)
EX2004	Amended Patent Case Scheduling Order, <i>Eagle View Technologies, Inc. and Pictometry International Corp. v. Nearmap US, Inc.</i> , No. 2:21-cv-00283, ECF No. 99 (D. Utah July 26, 2022) (Oberg)
EX2005	Declaration of Dr. Chandrajit L. Bajaj (redacted)
EX2006	Transcript of Deposition of Dr. David A. Forsyth, Ph.D., January 24, 2023
EX2007	Reference Guide: Twister, 10/15/2008 (EX2007 in IPR2016-00592) (filed under seal)
EX2008	Declaration of Dr. Chandrajit L. Bajaj in IPR2016-00592, November 16, 2016 (redacted) (EX2008 in IPR2016-00592)
EX2009	Curriculum Vitae of Dr. Chandrajit L. Bajaj
EX2010	EVT Internal customer quality survey (EX2010 in IPR2016-00592) (filed under seal)
EX2011	Declaration of Chris Johnson (EX2011 in IPR2016-00592)
EX2012	2009 through 2012 revenue data (EX2012 in IPR2016-00592)
EX2013	2013 revenue data (EX2013 in IPR2016-00592)
EX2014	2014 revenue data (EX2014 in IPR2016-00592)
EX2015	2015 revenue data (EX2015 in IPR2016-00592)

EX2016	Comparison of claims 1 and 16 of the '737 Patent (redline comparison), and comparison of claims 1 and 26 of the '737 Patent (redline comparison)
EX2017	Plaintiff's Opening Markman Brief, <i>Eagle View Technologies Inc. et al. v. Nearmap US, Inc.</i> , No. 2:21-cv-00283-TS-DAO, ECF No. 245 (D. Utah Jan. 27, 2023) (Stewart)
EX2018	Defendant's Motion for Claim Construction, <i>Eagle View Technologies Inc. et al. v. Nearmap US, Inc.</i> , No. 2:21-cv-00283-TS-DAO, ECF No. 244 (D. Utah Jan. 27, 2023) (Stewart)
EX2019 - EX2029	Reserved
EX2030	Reference Guide: For Measuring Technicians, 10/15/2008 (Render House) (filed under seal) (EX2030 in IPR2016-00592)
EX2031	Declaration of Dr. Chandrajit L. Bajaj in IPR2016-00592, November 16, 2016 (filed under seal) (EX2031 in IPR2016-00592)
EX2032	Declaration of Dr. Chandrajit L. Bajaj (filed under seal)
EX2033	Reserved
EX2034	Reference Guide: Twister, 10/15/2008 (redacted) (EX2034 in IPR2016-00592)
EX2035	2009 through 2012 revenue data (redacted) (EX2035 in IPR2016-00592)
EX2036	2013 revenue data (redacted) (EX2036 in IPR2016-00592)
EX2037	2014 revenue data (redacted) (EX2037 in IPR2016-00592)
EX2038	2015 revenue data (redacted) (EX2038 in IPR2016-00592)
EX2039	Reference Guide: For Measuring Technicians, 10/15/2008 (Render House) (redacted) (EX2039 in IPR2016-00592)
EX2040	Patent Owner Response in IPR2016-00592 (filed under seal)

CERTIFICATE OF WORD COUNT

Under 37 C.F.R. § 42.24, the undersigned attorney for the Patent Owner, declares that the argument section of this Sur-reply (Sections I-V) has 5,596 words, according to the word count tool in Microsoft Word™.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Eagle View Technologies, Inc.	§	Patent Owner's Sur-reply
and Pictometry International	§	
Corp.,	§	U.S. Patent No. 9,135,737
Patent Owner	§	

CERTIFICATE OF SERVICE

The undersigned certifies, under 37 C.F.R. § 42.6, that service was made on the Patent Owner as detailed below.

Date of service July 11, 2023

Manner of service Electronic Service: IPR53317-0003IP1@fr.com

Documents served Patent Owner's Sur-reply to Petitioner's Reply; Patent Owner's Second Motion to Seal

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