

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW JERSEY  
CAMDEN VICINAGE**

_____ )		
Eagle View Technologies, Inc. <i>et al.</i> , )		
Plaintiffs, )		Civil No. 15-07025 (RBK/JS)
v. )		<b>Opinion</b>
) )		
Xactware Solutions, Inc. <i>et al.</i> , )		
Defendants. )		
_____ )		

**KUGLER**, United States District Court Judge

This is a patent infringement action brought by Eagle View Technologies and Pictometry International [together "Plaintiffs"] against Xactware Solutions and Verisk Analytics [together "Defendants"]. Before the Court is Defendants' summary judgment motion ["the motion"] (ECF Doc. 467) under Federal Rule of Civil Procedure ["Fed. R. Civ. P." or "Rule"] 56(a) that the relevant patent claims are unpatentable under 35 U.S.C. § 101. For the reasons below, this motion is **DENIED**.

An appropriate Order accompanies this Opinion.

**1.0 Background and Procedure**

Plaintiffs are the owners of the patents at issue<sup>1</sup> that recite, among other things, business methods, systems, and computer readable storage media for providing a roof repair estimate<sup>2</sup>. The claimed invention applies photogrammetric methods, that is, trigonometric calculations, to images of rooves in aerial photographs to compute roof measurements, in particular, roof pitch. Defendant Xactware Solutions, Inc., is a subsidiary of Defendant Verisk Analytics, and provides online technology tools and systems to insurance carriers, remodelers and construction service providers for determining replacement-cost. The parties have asserted they are competitors to each other (ECF Doc. 15:¶1)<sup>3</sup>.

The Court assumes the parties' familiarity with the procedural history of this litigation and points to only those events relevant to the motion. On 23 September 2015, plaintiffs filed

<sup>1</sup> US8,078,436, re-examined (" '436 patent"); US8,170,840 (" '840 patent"); US8,818,770 (" '770 patent"); US9,129,376 (" '376 patent"); US8,825,454 (" '454 patent"); US9,135,737 (" '737 patent").

<sup>2</sup> The asserted claims are: claims 2, 21 and 36 of the '436 patent; claim 12 of the '770 patent; claims 10 and 18 of the '840 patent; claims 17, 20, and 23 of the '376 patent; claim 25 of the '737 patent; claim 26 of the '454 patent.

<sup>3</sup> "Doc." numbers refer to the document listed in the CM/ECF database of the U.S. District Court of New Jersey.

their original complaint against defendants and on 30 November 2015, an amended complaint. Both of these (ECF Docs. 1 and 30) allege direct and indirect infringement under 35 U.S.C. §§ 271(a) and (b) of at least one claim of each patent at issue. The case has proceeded through various milestones, including the *Markman* hearing and the *Markman* opinion (ECF Doc. 332). The parties have completed discovery, exchanged expert reports and disclosures, and submitted summary judgment motions aiming to dispose of certain issues or of the case itself, as well as motions *in limine* to exclude experts' testimony ("*Daubert* motions"). ECF Doc. 459 - 474. This is one of the summary judgment motions.

## **2.0 Parties Contentions**

### **2.1 Defendants**

Defendants contend there is no dispute of material fact that the relevant claims are unpatentable as a matter of law in light of the Supreme Court's two-step test set forth in *Alice Corp. v CLS Bank Int'l.*, 134 S.Ct. 2347, 2350 (2014). In particular, defendants assert the patent claims fail step 1 of *Alice* for reciting the abstract idea of using photogrammetry to calculate roof slope (pitch) and other geometric measurements of a building and then to generate a roof report from the calculations. ECF Doc. 468:6-9, 17-19. They further assert the claims also fail *Alice* step two, and specifically, no material fact dispute exists as to whether the claims recite computer elements operating in a manner that is well-understood, conventional, and routine. ECF Doc. 468:19-27-30.

Plaintiffs counter that defendants' analysis of *Alice* step one is incorrect. Since the human mind cannot perform the claimed steps, in particular, the generation of a three-dimensional model of two or more correlated but different views of a roof, the recited method is not merely a computerized replacement of mental activity, but a new, computerized method of generating roof reports, improved over manual report creation. ECF Doc. 504: 19-20, 39-41.

Plaintiffs also argue defendants' analysis of *Alice* step two is likewise incorrect. The specific improvements recited in the claims, in particular, the use of non-stereoscopic images of roofs, was neither known nor routine and is an inventive step over the prior art. ECF Doc. 504: 19-26, 41-44.

## **3.0 Standards**

### **3.1 Summary Judgment Generally**

Summary judgment is appropriate "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a

matter of law.” *Fed. R. Civ. P.* 56(c). An issue is “genuine” if the evidence is such that a reasonable jury could return a verdict for the non-moving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). A factual dispute is “material” if it might affect the outcome of the case under governing law. *Id.*

The movant bears the initial burden of proof to present those portions of the record it believes demonstrate the absence of a genuine issue of material fact. *Celotex Corp. v. Catrett*, 477 U.S. 317, 322, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986). After the moving party has met its initial burden, “the adverse party’s response, by affidavits or otherwise as provided in this rule, must set forth specific facts showing that there is a genuine issue for trial.” *Fed. R. Civ. P.* 56(e).

Summary judgment is appropriate if the non-moving party fails to rebut by making a factual showing “sufficient to establish the existence of an element essential to that party’s case, and on which that party will bear the burden of proof at trial.” *Celotex*, 477 U.S. at 322. The evidence introduced to defeat or support a motion for summary judgment must be capable of being admissible at trial. *Callahan v. AEV, Inc.*, 182 F.3d 237, 252 n. 11 (3d Cir.1999) (citing *Petruzzi’s IGA Supermarkets, Inc. v. Darling-Delaware Co.*, 998 F.2d 1224, 1234 n. 9 (3d Cir.1993)).

In evaluating whether there is a genuine dispute of material fact, the court looks at the evidence in the light most favorable to the non-movant and draws all reasonable inferences in their favor (*Burns v. Pa. Dep’t of Corr.*, 642 F.3d 163, 170 (3d Cir.2011)) but neither weighs the evidence nor makes credibility determinations, which are tasks for the fact finder. *Petruzzi’s IGA Supermarkets*, 998 F.2d at 1230. Speculation, conclusory allegations, suspicions, or mere denials do not rise to the level of evidence that suffices to raise a genuine dispute of material fact. *Jutrowski v. Township of Riverdale*, 904 F.3d 280, 288-289 (3d Cir. 2018). Nor does reliance on the pleadings; rather the non-moving party “must present affirmative evidence ... from which a jury might return a verdict in his favor.” *Anderson*, 477 U.S. at 256.

### **3.2 Invalidity Standard Generally**

As a preliminary matter, defendants style this motion as seeking summary judgment of the unpatentability of the relevant claims. Although the statutory standards under 35 U.S.C. §§ 101, 102, 103, and 112 are the same for determining the unpatentability of the patent claims as well as their invalidity, the term patentability better describes an inquiry regarding not-yet-granted claims, while invalidity applies to an inquiry for claims already issued in U.S. patents, i.e., to the inquiry in this motion.

The linguistic distinction is important in order to apply the correct burden of proof. Under 35 U.S.C. §282, a U.S. patent is afforded a statutory presumption of validity. A party seeking to prove an invalidity defense to infringement—such as patent ineligibility under §

101—can overcome this presumption only by clear and convincing evidence.<sup>4</sup> *Microsoft Corp. v. i4i Ltd. Partnership*, 564 U.S. 91, 97 (2011). Thus, the motion seeks to have this Court determine whether the relevant granted claims are patent ineligible under 35 U.S.C. §101, and thus invalid. The Federal Circuit has clarified the clear and convincing burden applies to all invalidity arguments (*Sciele Pharma Inc. v. Lupin Ltd.*, 684 F.3d 1253, 1260 (Fed. Cir. 2012)) whether previously raised before the U.S. Patent and Trademark Office [“USPTO”] or newly raised during litigation. *Id.*

### 3.3 Invalidation Standard Under 35 U.S.C. 101 [“§101” or “101”]

Amendments to the U.S. Patent Act under the America Invents Act of 2011 did not change 35 U.S.C. §101, which provides four broad categories of patentable subject matter: any new and useful process, machine, manufacture, or composition of matter as well as any new and useful improvement of these. *Id.* The Supreme Court recognizes three exceptions to the statutory categories: “law of nature, physical phenomena, and abstract ideas”. *Bilski v. Kappos*, 561 U.S. 593, 601 (2010) [“*Bilski II*”].

Moreover, the Supreme Court in *Alice Corp. Pty. Ltd. v. CLS Bank Intern*, 573 U.S. 208, 217 (2014) has articulated a two-step analysis [“§101 inquiry”] to identify whether claims are patent eligible (i.e., valid) or patent ineligible as a statutory exception (i.e., invalid). In step one of the §101 inquiry, the “abstract idea step”, a court analyzes whether the claims are directed to a patent-ineligible concept (law of nature, naturally occurring phenomena, or abstract idea). *Id.* If so, the court in step two considers the elements of each claim both individually and as an ordered combination to determine if additional elements in each claim “transform the nature of the claim” into a patent-eligible invention. *Id.* [quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 78-79 (2012)].

Step one is a meaningful first-stage filter and requires considering whether the character of the claims as a whole is directed to excluded subject matter. *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015).<sup>5</sup> For claims that recite a computerized method, the step one inquiry focuses on “whether the claims are directed to an improvement to computer functionality versus being directed to an abstract idea.” *Visual Memory LLC*, 867 F.3d at 1258 [quoting *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed.

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<sup>4</sup> See Sean B. Seymore, *The Presumption of Patentability*, 102 (6) MINNESOTA L. REV. 990, 996 n.39 and 996-1003 (2013) [detailing the shifting burdens of proof of patentability during the give and take of patent examination]. The burdens of proof to demonstrate patentability of claims during patent examination are not the same as that required to demonstrate invalidity after grant. The burden on the examiner is to show a *prima facie* case of unpatentability through a preponderance of the evidence. *In re Magnum Oil Tools Int'l.*, 829 F.3d 1364, 1375-1377 (Fed.Cir. 2016).

<sup>5</sup> To be clear, both steps of the §101 inquiry involve an “overlapping scrutiny of the content of the claims”. *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253 (Fed. Cir. 2017) [quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1351 (Fed. Cir. 2016)].

Cir. 2016). Moreover, at step one, the court also reflects on the specifically recited elements in the claim to avoid characterizing the invention too generally. *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016).

At this stage, if the court finds the claims recite a patent eligible invention, the § 101 inquiry ends. However, if a claim is found to recite a law of nature, a naturally occurring phenomenon, or an abstract idea, the court moves to step two, the “inventive concept” step. This inquiry looks at what else is recited in the claim besides the patent ineligible idea, and particularly for an inventive concept that transforms the claim into something significantly more than the idea itself. *Alice*, 573 U.S. at 217-218.

Step two requires the claims recite elements that are more than well-understood, routine, and conventional activities previously known in the art. *See Berkheimer v. HP Inc.*, 881 F.3d 1360, 1367 (Fed. Cir. 2018) [citations omitted] [*vacating* summary judgment that patent claims were ineligible subject matter because a dispute of material fact existed whether recited elements were routine, etc.]. *Accord Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1126 (Fed. Cir. 2018) [*vacating* a Rule 12(b)(6) determination that patent claims were ineligible because the pleadings asserted claim elements that were not routine]. The step two inquiry ensures that “ ‘[s]imply appending conventional steps, specified at a high level of generality,’ [is] not ‘enough’ to supply an ‘inventive concept.’ ” *Alice*, 573 U.S. at 222 [citing *Mayo*, 566 U.S. at 78-79]. In this step, the court looks to both the claims and the specification. *See, e.g., BASCOM Glob. Internet Serv., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016.)

### 3.4 Standard of Summary Judgment for Patent Ineligibility of Relevant Claims

The above individual standards intertwine to burden the summary judgment movant to show no dispute of material fact exists such that the relevant claims are invalid by clear and convincing evidence. However, this general statement of the intertwined standard fails to make clear the complex showing the movant is burdened with. Put simply, the movant must show no material fact dispute exists that the claims fail step one and/or step two of the §101 inquiry. This showing is made difficult because, even though patent eligibility of relevant claims is a legal question, the Federal Circuit recently held that whether the claims fail step two<sup>6</sup> involves a fact determination. *Berkheimer v. HP Inc.*, 881 F.3d at 1368-1369.

Importantly, *Berkheimer* demonstrates that non-routine or unconventional improvements described in the specification and recited in the claims create a factual dispute sufficient to defeat a summary judgment motion. *Id.* at 1369; *see Valmont Industries, Inc. v.*

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<sup>6</sup> that is, recite elements a skilled artisan finds beyond well-understood, conventional or routine.

*Lindsay Corp.*, 2018 WL 5962469 at \* (14 Nov 2018 D. Del.) [ in Rule 12(b)(6) context, *finding* claims patent ineligible because improvements in the specification were not recited in the claims]. Moreover, at least two district courts have followed *Berkheimer's* example: *Sycamore IP Holdings LLC v. AT&T Corp.*, 294 F.Supp.3d 620, 651-654 (E.D. Tex.) and *Vaporstream, Inc. v. Snap, Inc.*, 2018 WL 1116530, at \*5-6 (27 Feb 2018 C.D. Cal.). These cases held that improvements described in the specification and recited in the claims defeat a summary judgment motion that claims are patent ineligible. The basis of the rulings was that a material fact dispute existed whether the recited improvements were routine or conventional.

Proving whether there is no factual dispute that the claims recite only routine improvements must be done by clear and convincing evidence (*Microsoft v. i4i*, 564 U.S. at 95) and all ambiguities drawn in the non-moving party's favor. *Scott v. Harris*, 550 U.S. 372, 380 (2007); *Wishkin v. Potter*, 476 F.3d 180, 184 (3d Cir. 2007).

#### **4.0 Discussion**

##### **4.1 Alice Step One: What the Relevant Patents are Directed to**

The Federal Circuit has distinguished between claims “directed to an improvement to computer functionality versus being directed to an abstract idea”. *Enfish*, 822 F.3d. at 1335. *See also DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014) [*differentiating* between abstract ideas and necessarily-computerized improvements that yield improved solutions primarily because of the computerized methodology]. This inquiry emphasizes whether the claims pre-empt “the basic tools of scientific and technological work” (*Alice*, 573 U.S. at 216 [quotations omitted]) and compares the claimed advance relative to the prior art to see if the claim’s ‘character as a whole’ is directed to excluded subject matter. *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed.Cir. 2016). To that end, this inquiry must avoid “oversimplifying the claims by looking at them generally and failing to account for the specific requirements of the claims. *McRO*, 837 F.3d at 1313 [internal quotation marks omitted].

Defendants repeatedly assert the relevant claims are directed to a mere combination of general scientific tools, namely, the use of aerial image photogrammetry and roof pitch estimation, and is therefore just an abstract idea. They assert the relevant claims do not pre-empt all uses of photogrammetry but nonetheless all of its uses for generating a roof estimate report. Defendants further aver a human actor reviewing the aerial images with the recited computerized method can isolate and identify on a roof image architectural features, such as ridges, planes, concavities, etc. and therefore the software works merely as a kind of CAD<sup>7</sup> that

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<sup>7</sup> Computer-aided Design

enables a human to edit the image of the roof. Defendants also assert the recited method requires human manipulation to create or select on the roof image those points that are correlated together and from which the roof report is generated. Accordingly, they argue, the recited method is just a computerized routine of what a human could do without the software and adds nothing to solving the problem of creating a roof estimate report but a computer. As support that such routine computerization of mental steps is not patent eligible, defendants note the Federal Circuit has rejected the use of a computer as a mere replacement for mental activity to create patent eligible subject matter. *Tranxition, Inc. v. Lenovo (U.S.) Inc.*, 664 F. Appx. 968, 972 (Fed. Cir. 2016); *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat. Ass'n.*, 776 F.3d 1343, 1347 (Fed. Cir. 2014); *McRO*, 837 F.3d. at 1299.

As required for step one of the §101 inquiry, the Court looks at what the recited invention is directed to as a whole as well as to its individual, specific elements. As a whole, the asserted claims are directed to a computing system, a computer-implemented method for generating a roof estimate report, a computer-implemented method in a roof estimate report system, as well as non-transitory computer readable media that execute stored software instructions of the computer-implemented method. The recited system, method and non-transitory computer readable media are directed to correlating points on different aerial views of different planar sections of a roof in order to create a mathematical model or “geometric identification” of the contours of the roof section by calculating through photogrammetry common geometric roof features.

Plaintiffs have directed the Court to certain, individual claim elements as the basis of, at least in part, a technological solution to the problem of generating a roof report without a human’s direct measurement of roof section. Below are those claim elements the Court finds particularly telling:

From the '436 patent: A computing system for generating a roof estimate report: ...

- generate, based at least in part on the correlation of a first and second aerial images that are not a stereoscopic pair, 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 ...
- correlating the first and second aerial images includes receiving an indication of one of more corresponding points in each aerial image; and ...
- Receiving the indication of the corresponding points(s) from a user.

From the '770 patent: In a computer-implemented method in a roof estimation system: ...

- displaying ... a graphical user interface including a first aerial image of a roof structure ...and at least one first visual marker that is moveable by a user in a same display window as the first aerial image...
- moving the first visual marker with respect to the first aerial image of the roof structure to a first location in response to input from the user;
- displaying a second aerial image of the roof structure...**the second aerial image providing a different view of the first aerial image;**
- displaying a location of a second visual marker on the roof structure ... in the second aerial image of the roof structure based on an indication received from the stored data in the memory of the first location ... to which the user had moved the first visual marker; and
- generating ...a roof estimate report...[which] **includes one or more top plan views of a model of the roof annotated with ...corresponding slope, area, or ...lengths or edges ... of at least some of the ... planar roof sections of the model of the roof.**

From the '840 patent: A computing system for generating a roof estimate report comprising: a memory; and a roof estimation module ... stored on the memory and ... when executed ...

- **provide[s] roof measurement information based on the model of the roof, [which includes] a measure of the pitch pf the one planar roof section.**

From the '376 patent: A computer-implemented method in a roof estimation system:

- displaying, by the roof estimation system, a graphical user interface including an aerial image of a roof structure...and a pitch determination marker that is an interactive user interface control that can be manipulated by the operator...to specify pitch of the roof structure...
- **wherein the pitch determination marker is an envelope tool ...**
- **wherein the computer executable instructions...adjust an angle of a first surface of the envelope tool and a second surface of the envelope tool so that the first surface lies substantially atop a first section of the roof and the second surface lies substantially atop a second section of the roof.**

From the '737 patent: A non-transitory computer-readable storage medium having computer executable instructions stored thereon that ... [perform] a method comprising: ...



- overlaying a line drawing on corresponding locations of a roof feature ... on first and second aerial images of the roof, wherein the first aerial image provides a first view of the roof... and the second aerial image provides a second view of the roof...
- **in response to changes in the line drawing overlaid on the first aerial image, displaying corresponding changes to the line drawing overlaid on the second aerial image...**

From the '454 patent: A computer-implemented method including a computer system... comprising...

- **changing, by the computer system ..., a line in the second line drawing** that corresponds to the same feature in the first line drawing that was changed by the user, the change in the second line drawing **being made by the computer system in response to the change that was made by the user in the first line drawing;**...

A recurring theme in these individual claim elements is that two non-stereoscopic and non-identical images of the roof structure can be manipulated via the computer to overlaid each other and/or otherwise yield a plan view of a roof section that incorporates different views of that section. This overlaying of different, non-stereoscopic images can create a more or less 3-D model, complete with annotated measurements of architectural features of the roof section.

Plaintiffs argue the creation of the 3-D roof model is not accomplishable by the human mind unaided by the computer's imaging technique. Defendants characterize the recited methods, systems, and computer readable media as merely a computerized replacement for a human sketch of two, non-stereoscopic views of a roof structure.

However, the Court finds defendants' characterization insufficient. The relevant claims are not directed merely to correlating by the human mind two different aerial views. Nor do the claims merely replace a human's sketch of a roof section from different aerial views.

The 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. Defendants' characterization oversimplifies the claims, which are more specific and concrete, and hence presenting a technological improvement.

For purposes of the first step of the §101 inquiry, the Federal Circuit distinguishes between claims that "are directed to an improvement to computer functionality versus being directed to an abstract idea." *Enfish*, 822 F.3d at 1335. The invention recited in the relevant

claims includes at a minimum the creation of a roof model primarily through the correlation of data points shown on two different, non-stereoscopic aerial views of a roof structure. The roof model is calculated by software using photogrammetric methods to be sure but that calculation is made possible only by the correlating of different points on separate, non-stereoscopic views of the roof.

This creation of a roof model via calculation of roof geometry like pitch, area and perimeter is a technological solution to the previous method of climbing up on the roof to physically measure elevations at different locations on the roof and then calculating desired roof geometry. The most fundamental improvement to computer functionality here was getting the computer to correlate two non-stereoscopic views of different sections of a roof. This is an improvement akin to that in *Thales Visionix, Inc. v. U.S.*, 850 F.3d 1343, 1348 (Fed. Cir. 2017). There, the Federal Circuit found the claims patent eligible because they were directed to a method for using inertial sensors to create a frame of reference from which known mathematical equations calculated position and orientation of an object on a moving platform. The *Thales* inertial sensors are similar in function to selected points on the aerial images of a roof, which in the relevant claims are the fundamental mechanism to accomplish correlation of non-stereoscopic geometry of different points on a roof.

The Court does not find the asserted claims are directed to patent-ineligible subject matter as in *Affinity Labs*, 838 F.3d at 1258 [claims found directed to patent ineligible subject matter, to wit, directed to delivering broadcast content to cell phones without a technological improvement for effecting that delivery and therefore judged ineligible] or in *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1313 (Fed. Cir. 2016) [claims also found patent ineligible, that is, directed to characterizing e-mail based on received identifiers, and filtering the e-mail based on the identifiers]. Nor does the Court find the asserted claims directed to merely a result—roof estimation report— or “a process that qualifies as an ‘abstract idea’ for which computers are involved merely as a tool” (*Enfish*, 822 F.3d at 1335-36). Rather, as in *Finjan, Inc. v. Blue Coat Systems, Inc.*, 879 F.3d 1299, 1305 (Fed. Cir. 2018), the claims recite steps that achieve the result by defining an improvement to computer functionality.

Emphasized in *Enfish* and *Thales* is that the addition of a well-defined improvement directed to solving a technical problem is patent eligible subject matter. Applying the first step of the §101 inquiry to the asserted claims, the Court concludes the asserted claims are directed to an improvement in the functioning of a computer. They solve the specific problem of generating a roof repair estimate without direct human measurement of a roof. The claims rely on the concrete and specific technological solution of a computer’s correlating, with or without user input, different locations points on two, different, non-stereoscopic aerial views of a roof section and then calculating via photogrammetric methods from the correlated aerial

views a mathematical model of the roof section.

#### 4.2 **Alice Step Two: Inventive Concept**

Since the Court has found the relevant claims patent eligible under step one of the §101 inquiry, the analysis may end here. However, even if the claims were found directed to an abstract idea, a step two inquiry shows defendants have not met their clear and convincing burden that there is no material fact dispute as to whether the claim elements are routine or conventional. In step two, the claims are reviewed for their embodying a "specific, discrete implementation of the abstract idea" and thus an inventive concept. *BASCOM*, 827 F.3d at 1350.

As stated above, the asserted claims recite a specific set of steps to create a roof "model" (i.e., a mathematical construct) by correlation of two (or more) non-stereoscopic aerial views. The 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 specific inventive concept.

Moreover, the parties dispute whether the human mind is even capable of mentally combining two non-stereoscopic views of an image into a third without first drawing the two views on paper in order to correlate the image into a unity. If the human mind is not so capable, this question belies there are no material facts in dispute and implies that the recited method, even if an abstract idea or pre-empting the entire field of computerized roof report generation, represents an improvement in the functioning of a computer, again, a specific inventive concept.

Other than asserting that the claims are the mere combination of photogrammetry and roof pitch estimation, defendants have not presented clear and convincing evidence that the specific combination of the claimed method steps or system elements were routine, well-understood or conventional at the time of the invention according to one of skill in the art in the field of generating roof pitch estimation reports.

Finally, the Court addresses plaintiffs' assertion that the USPTO had already weighed in on the patent eligibility of the claims during the prosecution of the '436 patent and the '840 patent. ECF Doc. 504:4, fn. 1. On pg.2 of a USPTO Non-Final Office Action for the '436 patent dated 10 May 2011,<sup>8</sup> the examiner rejected certain of the original claims under 35 U.S.C. §101 for being directed to non-statutory subject matter. In reviewing the '436 patent specification

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<sup>8</sup> Accessible from USPTO Public Pair for the '436 Patent.

for the definition of the recited term “machine-readable medium”, the examiner found that term to mean “data signal”. This grounded his §101 rejection of claims 14-22 for reciting subject matter outside the four patent eligible categories. Specifically, a data signal is not a machine, article of manufacture, method, or composition of matter.

It is clear from the prosecution history that the USPTO had not considered the patent eligibility of the relevant claims to the extent the Office reviews computerized improvement claims today after *Alice*.<sup>9</sup> Largely, this §101 rejection concerned an informality in claim language,<sup>10</sup> which the patentee fixed by adding the element “non-transitory”. Thus, the implication that relevant patent claims had been subjected by the USPTO to a §101 inquiry and emerged unscathed is misleading.

## 5.0 Conclusion

In sum, the Court holds it has not been demonstrated by clear and convincing evidence on the summary judgment record that either the relevant claims are directed to an abstract idea or embody no inventive concept. This motion is therefore DENIED.

Dated: 29 January 2018

s/ Robert B. Kugler  
ROBERT B. KUGLER  
United States District Court Judge

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<sup>9</sup> See Manual of Patent Examining Procedure § 2106 *et seq.*, especially §2106.05 [describing in considerable detail how a patent examiner should analyze improvements to the functioning of a computer and claim elements that are well-understood, routine, and conventional].

<sup>10</sup> In *In re Nuijten*, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007), the Federal Circuit had held that “transitory” claimed inventions are not directed to statutory subject matter. Accordingly, Patent examiners, using the broadest reasonable interpretation of a patent claim, then rejected computer media claims these recited a transitory signal.

Subsequently, a USPTO policy, set forth on 26 January 26 2010 and about eighteen months before the Office Action discussed above, allowed a patent applicant to overcome a non-statutory subject matter rejection under 35 U.S.C. §101 by adding the claim element “non-transitory”, even when the specification was silent on the matter.