

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

EAGLE VIEW TECHNOLOGIES, INC., and
PICTOMETRY INTERNATIONAL CORP.,

Plaintiffs,

v.

ROOFR, INC.,

Defendant.

Civil Action No. 21-1852-RGA

MEMORANDUM OPINION

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ANDREWS, UNITED STATES DISTRICT JUDGE:

Before me is Defendant’s motion to dismiss for failure to state a claim. (D.I. 20). The parties have fully briefed the issues. (D.I. 21, 22, 23). I heard oral argument on December 2, 2022. (D.I. 27, hereinafter “Tr.”). For the following reasons, I will GRANT Defendant’s motion with respect to claim 1 of all three patents.

I. BACKGROUND

Pictometry International Corp. and Eagle View Technologies, Inc. sued Roofr, Inc. for infringement of U.S. Patent Nos. 10,648,800 (“the ’800 Patent”), 9,183,538 (“the ’538 Patent”), and 8,170,840 (“the ’840 Patent”). (D.I. 12 at 1).

Eagle View, which was founded in 2008, was a pioneer in “remote aerial roof measurement service[s].” (*Id.* at 2). Eagle View developed technology capable of producing “extremely accurate and detailed roof reports using aerial imagery” that “were used to, among other things, estimate the cost of roof repairs, construction, and insurance.” (*Id.*). In 2013, Eagle View merged with Pictometry—an “innovator of ... aerial oblique image capture and processing technologies”—and formed a new company, EagleView Technology Corporation, which continues to develop aerial roof measurement products and which comprises Plaintiffs Eagle View and Pictometry. (*Id.*). I hereinafter refer to Plaintiffs collectively as “EagleView.”

The asserted patents generally relate to aerial roof measurement. The ’840 patent has been the subject of prior decisions. In 2015, EagleView brought a patent infringement action against unrelated Defendants Xactware Solutions and Verisk Analytics in the United States District Court for the District of New Jersey. *Eagle View Techs., Inc. v. Xactware Sols., Inc.*, 358 F. Supp. 3d 399 (D.N.J. 2019) (hereinafter “*Xactware I*”). In that case, EagleView asserted six patents and eleven claims, including claims 10 and 18 of the ’840 patent. *Id.* at 402 n. 2. The Court denied

Defendants' § 101 challenge at the summary judgment stage, holding that the asserted claims were directed to patent-eligible subject matter. *Id.* at 411. It did so again after trial, denying Defendants' motion for judgment as a matter of law on the basis of § 101. *EagleView Techs., Inc. v. Xactware Sols., Inc.*, 485 F. Supp. 3d 505 (D.N.J. 2020) (hereinafter "*Xactware II*"). The second decision involved five patents and six claims, including claim 10 of the '840 patent. *Id.* at 513. In 2021, EagleView asserted nine aerial roof measurement patents, including the '840 patent, against unrelated Defendant GAF Materials. *Eagle View Techs. v. GAF Materials, LLC.*, No. 2:22-215-TS-DAO (D. Utah Dec. 12, 2022). The Court denied Defendant's motion to dismiss under § 101. *Id.* at 8. The other two patents have not been litigated.¹

With respect the '800 patent, EagleView asserts "at least claim 1" (D.I. 12 at 25); with respect to the '538 patent, it asserts "claim 1", "claims 6 and 7", and "at least claim 14" (*id.* at 17-24); and with respect to the '840 patent, it asserts "at least claim 1" (*id.* at 12). Roofr argues that claim 1 of each patent is representative. (D.I. 21 at 24-25). EagleView disagrees. (D.I. 22 at 22-24).

Roofr devotes roughly a page and a half of its 25-page opening brief to its representative claim analysis. (*See* D.I. 21 at 24-25). The remainder of its briefing deals almost entirely with claim 1 of each asserted patent. The asserted patents contain a total of 63 claims. I thus find Roofr's

¹ EagleView mentions that "the asserted '800 patent is an indirect continuation of U.S. Patent No. 8,542,880, which also survived a Section 101 challenge in the District of New Jersey." (D.I. 22 at 1). But the survival was not a decision on the merits. Rather, the Court declined to undertake a § 101 analysis in light of ongoing claim construction disputes between the parties. (D.I. 22-1, Ex. A at 6). That decision therefore said nothing about the patent-eligibility of the '800 patent.

This is also true of *EagleView Techs, Inc. v. Nearmap US, Inc.*, 2021 WL 5299729 (D. Utah Nov. 15, 2021), in which a court in the District of Utah denied another defendant's motion to dismiss on the basis of § 101. That decision did not involve any of the patents at issue here, nor even the predecessors of those patents. *Id.* at *1.

briefing insufficient to support a determination that claim 1 of each asserted patent is representative of all remaining claims in each asserted patent.

I will therefore limit this opinion to deciding whether claim 1 of each asserted patent is patentable under § 101.

Claim 1 of the '800 Patent recites:

1. A process, comprising:

receiving first location data;

providing visual access to a first image corresponding to the first location data, the first image including a roof structure of a building;

providing a first computer input capable of signaling a designation from a user of a building roof structure location within the first image, wherein the building roof structure location is a geographic position of the building roof structure and is different than the first location data;

receive a designation of the building roof structure within the first image;

responsive to receiving the designation of the building roof structure location, providing a second computer input capable of signaling user-acceptance of the building roof structure location within the first image, wherein user-acceptance is one or more affirmative steps undertaken by the user to confirm the designation of the building roof structure location; and

subsequent to receiving the user-acceptance confirming the designation of the building roof structure location, providing a report for the building roof structure.

Claim 1 of the '538 patent recites:

1. One or more non-transitory computer readable medium storing a set of computer executable instructions for running on one or more computer systems that when executed cause the one or more computer systems to: identify a geographic location of a roof; determine a footprint and predominant pitch of the roof by analyzing one or more image showing the roof; determine an estimated roofing area of the roof based on the predominant pitch and the footprint of the roof; and generate a roof report for determination of an amount of materials needed for a construction project, wherein the roof report includes at least one image showing the roof and the estimated roofing area of the roof.

Claim 1 of the '840 patent recites:

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

displaying an aerial image of a building having a roof comprising a plurality of planar roof sections that each have a corresponding pitch;

displaying a pitch determination marker operable to indicate pitch of a planar roof section, wherein the pitch determination marker is overlaid on the aerial image of the building having the roof;

receiving, based on the displayed pitch determination marker, an indication of the pitch of one of the plurality of planar roof sections of the roof of the building; and

modifying a model of the roof based on the received indication of the pitch of the one planar roof section.

II. LEGAL STANDARD

Patentability under 35 U.S.C. § 101 is a threshold legal issue. *Bilski v. Kappos*, 561 U.S. 593, 602 (2010). Accordingly, the § 101 inquiry is properly raised at the pleading stage if it is apparent from the face of the patent that the asserted claims are not directed to eligible subject matter. *See Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1360 (Fed. Cir. 2017). The inquiry is appropriate at this stage “only when there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law.” *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018).

Section 101 of the Patent Act provides: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. The Supreme Court recognizes three categories of ineligible subject matter: laws of nature, natural phenomena, and abstract ideas. *Alice Corp. Pty. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014). The purpose of these exceptions is to protect the “basic tools of scientific and

technological work.” *Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.*, 566 U.S. 66, 71 (2012).

In *Alice*, the Supreme Court reaffirmed the framework laid out in *Mayo* “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” 573 U.S. at 217. First, the court must determine whether the claims are drawn to a patent-ineligible concept. *Id.* “The ‘abstract ideas’ category embodies ‘the longstanding rule that an idea of itself is not patentable.’” *Id.* (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). For software-implemented inventions, the step-one determination “often turns on whether the claims focus on specific asserted improvements in computer capabilities or instead on a process or system that qualifies as an abstract idea for which computers are invoked merely as a tool.” *Int’l Bus. Machs. Corp. v. Zillow Grp., Inc.*, 50 F.4th 1371, 1377 (Fed. Cir. 2022) (citation omitted). I must “articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful.” *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1347 (Fed. Cir. 2017).

If the claims fail step one, then the court must look to “the elements of the claim both individually and as an ordered combination” to see if there is an “inventive concept—i.e., an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.” *Alice*, 573 U.S. at 217-18 (cleaned up). “A claim that recites an abstract idea must include additional features to ensure that the claim is more than a drafting effort designed to monopolize the abstract idea.” *Id.* at 221 (cleaned up). Further, “the prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of the idea to a particular technological environment.” *Id.* at 222 (cleaned up) (quoting *Bilski*, 561 U.S. at 610-11). Thus, “the mere recitation of a generic computer

cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Id.* at 223. To save a patent at step two, an inventive concept must be evident in the claims. *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017).

III. DISCUSSION

Roofr argues that the asserted patents are directed to abstract ideas and are therefore invalid as patent-ineligible under § 101.

A. '800 Patent

1. *Alice* Step One

The '800 patent addresses the problem of “incorrectly geo-coded” and “low-resolution” aerial image databases, which impede the reliability of roof reports that use images from those databases. *See* '800 Patent, 10:8-25; (*see also* D.I. 12 at 9-10). Claim 1 describes the process of displaying an image of a roof corresponding to a geographic location the user provides, allowing the user to select a roof at a different geographic position within that image, allowing the user to confirm that selection, and then providing an unspecified report for the selected roof. *See* '800 Patent, Claim 1.

Roofr argues that claim 1 of the '800 patent “claims the abstract idea of selecting a roof from an image.” (D.I. 21 at 7). EagleView complains that Roofr “ignores numerous specifics of the claims that tie them to the concrete technological improvement that EagleView developed.” (D.I. 22 at 12-13) (highlighting the report element, as well as the fact that the user selects a geographic location distinct from the location corresponding to the initial image). I agree that Roofr’s characterization does not fully capture what the claims are “directed to.” The distinction between initial and user-derived location data is an important aspect of the claimed advance. The report element, however, is too generic to constitute more than trivial “post-solution activity.”

Bilski, 561 U.S. at 610-11. I therefore conclude that the claim is directed to selecting a roof from an image, where that image corresponds to a location other than that of the selected roof.

This formulation, however, does not help EagleView. Stripped of the generic report element, claim 1 of the '800 patent amounts to “limiting and coordinating the display of information based on a user selection.” *Zillow*, 50 F.4th at 1378. The Federal Circuit has made clear that such claims are directed to an abstract idea. *See, e.g., id.* at 1377-83; *Trading Techs. Int'l, Inc. v. IBG LLC*, 921 F.3d 1084, 1092-95 (Fed. Cir. 2019); *Move, Inc. v. Real Estate All. Ltd.*, 721 F. App'x 950, 956 (Fed. Cir. 2018). In particular, claim 1 is remarkably like the claims invalidated in *Zillow*. The *Zillow* patent, which related to graphical display technology, recited “presenting a map, having a user select a portion of that map, and then synchronizing the map and its corresponding list to display a more limited data set to the user.” *Zillow*, 50 F.4th at 1378. The claim here recites similar data manipulation steps: presenting an image, allowing the user to select a portion of that image, and then displaying an updated result indicating the user's selection. The Federal Circuit concluded that the *Zillow* patent fell into the patent-ineligible abstract category of “collection of information, comprehending the meaning of that collected information, and indication of the results, all on a generic computer network operating in its normal, expected manner.” *Id.* (citation omitted). Just so here.

EagleView argues that the '800 patent is not directed to an abstract idea because it “claims a specific technique for identifying the roof of a building in an image for the purpose of determining the attributes of said roof” to overcome a problem “specifically arising in the field of digital imagery analysis for roof measuring.” (D.I. 22 at 8-9). In support, EagleView analogizes to *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014) and *McRO, Inc. v. Bandai*

Namco Games America, Inc., 837 F.3d 1299 (Fed. Cir. 2016). (D.I. 22 at 11-12). Neither case is helpful to EagleView here.

The invention in *DDR Holdings* allowed a host merchant website to maintain its visual ‘look and feel’ when a visitor, by clicking a hyperlinked advertisement, is transported to an outside merchant’s product page. 773 F.3d at 1257-58. The Federal Circuit held those claims to be patent-eligible because “they do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” *Id.* at 1257. Here, nothing about the asserted claim is “necessarily rooted” in computer technology. Identifying and presenting geographic information to a user is not a computer-centric solution; as Roofr points out, the same process has long been accomplished manually “in the context of printed maps and atlases.” (D.I. 23 at 1-2).

More importantly, the claim fails to recite any specific technological improvements. EagleView disagrees, arguing that the ‘800 patent claims a “specific implementation” akin to the technique claimed in *McRO*. (D.I. 22 at 11). I think *McRO* is distinguishable. That case dealt with patent claims directed to automatically animating facial expressions and lip synchronization for 3-D-animated characters. *McRO*, 837 F.3d at 1303. The Federal Circuit found those claims patent-eligible because they recited “specific, limited mathematical rules” that were distinct from the “subjective” process previously employed by animators. *Id.* at 13-14.

In contrast, the technology recited in claim 1 is entirely conventional, “requir[ing] nothing more than generic computer technology.” *Zillow*, 50 F.4th at 1379 (quoting *Int’l Bus. Machs. Corp. v. Zillow Grp., Inc.*, 549 F. Supp. 3d 1247, 1268 (W.D. Wash. 2021)). Roofr demonstrates why this is so. (D.I. 21 at 8-9). First, the initial image “may come from a variety” of sources, including

the public and well-known Google Earth image database. ’800 Patent, 10:8-13. Second, both user inputs (roof selection and confirmation) may constitute conventional user input from a generic computer. *E.g., id.*, 10:19-22 (roof selection may be “by click and dragging via computer mouse, arrows, or otherwise”); *id.*, 10:25-28 (confirmation may be by “button, enter, checkbox, or otherwise”). These techniques—mouse clicks, checkboxes, and confirmation buttons, and the like—are routine computer functions.

Consequently, the asserted claim “fail[s] to recite any assertedly inventive technology for improving computers as tools, and [is] instead directed to an abstract idea for which computers are invoked merely as a tool,” *Zillow*, 50 F.4th at 1377-78 (citations omitted). I therefore conclude that claim 1 of the ’800 patent is directed to an abstract idea.

2. Alice Step Two

Because claim 1 of the ’800 patent is directed to an abstract idea, I advance to *Alice* step two.

Individually, the elements do not recite an inventive concept. As discussed above, the specification shows that elements such as the image display and user inputs merely rely on conventional computer functions.

As an ordered combination, the elements do not recite an inventive concept that is “significantly more than a patent upon the ineligible concept itself.” *Alice*, 573 U.S. at 218 (cleaned up). Generic computer activity cannot supply an inventive concept. *See, e.g., Two-Way Media Ltd. v. Comcast Commc’ns, LLC*, 874 F.3d 1329, 1339 (Fed. Cir. 2017) (no inventive concept where claims recited nothing “other than conventional computer and network components according to their ordinary functions”).

EagleView argues that the conventionality of the user interface is a factual question that cannot be resolved at the motion to dismiss stage. (D.I. 22 at 13, 15) (citing *Aatrix*, 882 F.3d at 1125). As the Federal Circuit has explained, however, “the district court need not accept a patent owner’s conclusory allegations of inventiveness.” *Zillow*, 50 F.4th at 1379. “Only plausible and specific factual allegations that aspects of the claims are inventive are sufficient.” *Id.* (citation omitted). EagleView has not made plausible and specific allegations that the user interface is inventive. Ultimately, the claim recites nothing other than the use of routine computer functions to perform the abstract idea of selecting a roof from an image that did not originally correspond to the selected roof.

Thus, claim 1 of the ’800 patent does not supply an inventive concept at *Alice* step two. I therefore GRANT Roofr’s motion to dismiss claim 1 of the ’800 patent.

B. ’538 Patent

1. *Alice* Step One

Claim 1 of the ’538 patent suffers from deficiencies similar to those in claim 1 of the ’800 patent. The claim calls for the identification of the geographic location of a roof, the estimation of the roofing area of that roof based on the “predominant pitch” and “footprint” of the roof as obtained from an image of the roof, and the subsequent generation of a roof report—featuring both an image of the roof and its estimated area—“for determination of an amount of materials needed for a construction project.” ’538 patent, Claim 1. Roofr argues that the claim is directed to the abstract idea of “estimating roofing area using an image of a roof.” (D.I. 21 at 14). This time, I think that Roofr’s formulation is on point.

The Federal Circuit has repeatedly held that claims focused on “collecting information, analyzing it, and displaying certain results of the collection and analysis” are directed to an abstract

idea. See *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353-56 (Fed. Cir. 2016). *Elec. Power* is instructive. There, the representative claim recited “[a] method of detecting events on an interconnected electric power grid in real time over a wide area and automatically analyzing the events on the interconnected electric power grid....” *Id.* at 1351. The method involved gathering data from various sources, “detecting and analyzing events in real-time,” and displaying the results. *Id.* at 1352. The Federal Circuit held that these steps were abstract, as they did not “go beyond requiring the collection, analysis, and display of available information in a particular field, stating those functions in general terms, without limiting them to technical means for performing the functions that are arguably an advance over conventional computer and network technology.” *Id.* at 1351.

As Roofr illustrates in its motion, claim 1 of the ’538 patent boils down to a series of steps: “(a) collecting tangible information—*i.e.*, a geographic location and corresponding image; (b) analyzing that information using basic mathematical algorithms (*e.g.*, to determine a footprint, predominant pitch, and an estimated roofing area); and (c) displaying the results of the analysis (‘the estimated roofing area’) and collected information (‘at least one image showing the roof’).” (D.I. 21 at 23). Thus understood, the focus of the claims is on the selection of information, its analysis, and reporting the results of the analysis. This is abstract.

EagleView contends that its claim is not “mere data analysis” because, unlike the *Elec. Power* claims—which “do not even require a new source or type of information, or new techniques for analyzing it,” 830 F.3d at 1355—EagleView’s claim recites a “specific technique” unknown in the prior art. (D.I. 22 at 15-16). Specifically, EagleView points to “the specific technique of using the roof’s ‘predominant pitch’ and footprint” to calculate roofing area from an image. (*Id.*).

The trouble with EagleView’s argument is that the ’538 patent neither claims a process for ascertaining “predominant pitch” and “footprint,” nor claims a method of calculating roofing area from those parameters. The specification furnishes some details. For example, the specification suggests that the “footprint” is the two-dimensional boundary or overall outline of the roof, ’538 Patent, 12:8-9, and it states that the “predominant pitch” may, but need not, constitute a weighted average of the individual pitch measurements for multiple portions of the roof, ’538 Patent, 12:12-37. The asserted claim, however, merely provides that a computer “determine” both parameters “by analyzing one or more image showing the roof,” and “determine an estimated roofing area” in an unspecified manner “based on” those parameters. ’538 Patent, Claim 1.

As the Federal Circuit has explained, “the § 101 inquiry must focus on the language of the Asserted Claims themselves, and the specification cannot be used to import details from the specification if those details are not claimed.” *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 769 (Fed. Cir. 2019) (cleaned up). Generally, a “result-oriented” claim—one that “merely describes an effect or result dissociated from any method by which it is accomplished”—is abstract. *Zillow*, 50 F.4th at 1378. Claim 1 of the ’538 patent calls for the desired result of determining roofing area using a roof’s “footprint” and “predominant pitch,” but does not attempt to claim any method for achieving that result. Because it “describe[es] required functions ... without explaining how to accomplish any of the tasks,” *id.*, EagleView’s claim falls squarely into the category of “results-oriented” claims that the Federal Circuit has found indicative of a patent-ineligible abstract idea.

Other problems abound. Even if claim 1 recited a formula for each of the methods described above, the claim would be abstract. The Federal Circuit “has treated analyzing information ... by mathematical algorithms, without more, as essentially mental processes within the abstract-idea

category.” *Elec. Power*, 830 F.3d at 1354. The claim here is directed to an abstract idea under those principles, as the parameters computed under the claimed technique—such as roofing area and predominant pitch—comprise a series of mathematical calculations.

EagleView counters that a claim is not doomed to abstraction if a mathematical formula is required to complete the claimed method. (D.I. 22 at 18). But the case EagleView relies upon for this proposition—*Thales*, 850 F.3d at 1349—is distinguishable. In *Thales*, the claims applied the laws of physics to “the unconventional configuration of sensors” used to track an object on a moving platform. *Id.* That is to say, those claims involved the use of mathematical algorithms to achieve a physical-realm improvement in tracking system technology. *See id.* at 1348-49. Here, “the focus of the claims is not a physical-realm improvement but an improvement in wholly abstract ideas—the selection and mathematical analysis of information, followed by reporting or display of the results.” *SAP America, Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018).

I am not persuaded by EagleView’s suggestion that, under *McRO*, its claim is patent-eligible by virtue of its novelty with respect to “prior manual methods.” (D.I. 22 at 16-17). As EagleView explains, traditional methods of roof measurement involve in-person site visits in which roofers climb atop the roof and manually measure the precise pitch of each facet. (*E.g.*, D.I. 12 at 4-5; D.I. 22 at 16-17). EagleView argues that the ’538 patent’s approach—“only using images” to estimate roofing area, as well as employing predominant pitch to do so—supplies an unconventional concept that renders the claim patent-eligible. (D.I. 22 at 16-17). Indeed, as EagleView stresses both in its complaint and in its opposition brief, its technology has been praised as “revolutionary” in the roofing industry and recognized as such by another court. (*See, e.g., id.* at 4-5, 16-17; D.I. 12 at 5-6).

As the Federal Circuit has acknowledged, however, it “is not enough for eligibility” that the techniques claimed are “groundbreaking, innovative, or even brilliant” or “novel and nonobvious in light of prior art.” *SAP America*, 898 F.3d at 1163. EagleView thus mischaracterizes *McRO*. The claims in that case weren’t patent-eligible simply because they were novel; they were patent-eligible because, as explained, they recited specific technological improvements that were themselves unconventional. *See McRO*, 837 F.3d at 1303, 1313 (emphasizing that “the claims are limited to rules with specific characteristics”).

By contrast, this claim, just like claim 1 of the ’800 patent, recites conventional technology to implement conventional steps. As Roofr argues, the elements of the ’538 claim amount to nothing more than “basic parameters for calculating the area of a roof” (predominant pitch, footprint, and area) “using conventional computer components” (a generic computer processor). (D.I. 23 at 6). Both claims, apart from generic computer-implemented activities, recite processes that can be accomplished off the computer; as Roofr also observes, “Each of the recited steps could be performed manually by a person with access to physical photographs of a location.” (D.I. 21 at 16) (explaining that, for example, a person could manually compute a roof’s footprint and predominant pitch from an image of a building, estimate the roofing area using “basic geometry,” and enter that information into a report). Consequently, claim 1 of the ’538 patent “fail[s] to recite any assertedly inventive technology for improving computers as tools, and [is] instead directed to an abstract idea for which computers are invoked merely as a tool.” *Zillow*, 50 F.4th at 1377-78.

For the foregoing reasons, I conclude that claim 1 of the ’538 patent is directed to an abstract idea.

2. *Alice* Step 2

Claim 1 of the '538 patent does not recite an inventive concept. EagleView's argument to the contrary is that the recited technique is novel with respect to the field of image-based roof measurements. (D.I. 22 at 18-19). Whereas earlier approaches to image-based roof measurements involved "trac[ing] the outline of every facet of the target roof and then calculat[ing] the pitch of each facet" (D.I. 22 at 15), the '538 patent claims the "novel and simpler" approach of determining area from the roof's "predominant pitch" and "footprint" (*id.* at 16). According to Eagleview, this advance supplies an inventive concept. (*Id.* at 18-19). Not so.

EagleView relies upon *CosmoKey Sol'ns GmbH & Co. KG v. Duo Sec. LLC*, 15 F.4th 1091 (Fed. Cir. 2021). In that case, the representative claim at issue disclosed a method for authenticating the identity of a computer user performing an online transaction. *Id.* at 1093. The Federal Circuit concluded at step two that the claim recited an inventive concept, as it disclosed "a specific improvement to authentication that increases security, prevents unauthorized access by a third party, is easily implemented, and can advantageously be carried out with mobile devices of low complexity." *Id.* at 1098. The Court found that the claims recite "a technical solution to a security problem in networks and computers," *id.*, emphasizing the specific improvements achieved by the claim limitations at issue. For example, the invention simplified the authentication process because "the only activity that is required from the user for authentication purposes is to activate the authentication function at a suitable timing for the transaction." *Id.* at 1099.

CosmoKey, in short, answered the question of whether the claims at issue recited a "technological solution to a technological problem"—an inquiry that may arise at either step one or step two of *Alice*. See *F45 Training Pty Ltd. v. Body Fit Training USA Inc.*, 2022 WL 17177621, at *6 n.1 (D. Del. Nov. 17, 2022); see also *Zeta Global Corp. v. Maropost Marketing Cloud, Inc.*,

2022 WL 2533182, at *4 (S.D.N.Y. July 7, 2022) (citing *CosmoKey* at step one). I have already addressed this question at step one. Although EagleView is right that claim 1 of the '538 patent resembles the *CosmoKey* claim insofar as both patents provide “simpler” approaches (D.I. 22 at 18-19), that resemblance is superficial. The *CosmoKey* claim recited a specific technological improvement to address a technological problem; here, the claim fails to recite technological improvements or benefits beyond the use of the predominant pitch algorithm, which is itself an abstract idea.

Further, it does not appear that the purported improvement with respect to image-based roof measurements is tethered to the claim at issue. As Roofr observes (D.I. 21 at 16), Claim 1 does not recite any particular method for calculating predominant pitch, and the specification indicates that one possible method is a “weighted average of individual pitch factors.” '538 Patent, 12:12-14. Such a method would not obviate the need to calculate the pitch of every facet of the target roof.

Thus, I conclude that claim 1 of the '538 patent does not recite an inventive concept. I therefore GRANT Roofr's motion to dismiss claim 1 of the '538 patent.

C. '840 Patent

1. *Alice* Step 1

The '840 patent resembles the '538 patent (which EagleView has characterized as “an improvement on the '840.” (Tr. at 54)). Its general purpose is the same: measuring a roof based on an aerial image. '840 patent, 1:16-20. Claim 1 requires displaying an aerial image of a roof, overlaying a “pitch determination marker” tool on the image, allowing a user to manually operate the tool to input the pitch of a roof section, and modifying an unspecified model of a roof based on that input. '840 Patent, Claim 1.

Roofr argues that claim 1 of the '840 patent claims “the abstract idea of determining the pitch of a roof section using an aerial image of a roof.” (D.I. 21 at 20). I agree.

This claim presents the same problems as the last claim. Like claim 1 of the '538 patent, claim 1 of the '840 patent does not “go beyond requiring the collection, analysis, and display of available information” as implemented via routine computer processes. *Elec. Power*, 830 F.3d at 1351. The two primary limitations that distinguish this patent from the '538 patent—the “pitch determination marker” and the modification of a roof model—recite nothing unconventional. The “pitch determination marker” (which the specification also calls a “protractor tool,” '840 Patent, 12:40-54) is the computer analog of a standard real-world protractor, the purpose of which is, of course, to draw and measure angles. The claim discloses no unconventional technique for implementing this tool. Neither does the claim disclose an unconventional technique (or, for that matter, any specific technique at all) for modifying a model of the roof.

These limitations do not, therefore, constitute “specific technical solutions to technical problems.” (D.I. 22 at 20). In arguing to the contrary, EagleView relies heavily on the *Xactware* decisions. (*See id.* at 20-21). I have read and considered those decisions, and my conclusion is that they are not applicable here.

I begin by noting that the *Xactware* decisions dealt with different claims of the '840 patent. *Xactware I* involved claims 10 and 18. 358 F. Supp. 3d at 402 n. 2. *Xactware II* involved claim 10. 485 F. Supp. 3d at 513. EagleView concedes that no New Jersey Court has decided whether claim 1 of the '840 patent is patent-eligible. (Tr. at 67). As Roofr observes, however, claim 10 is “[n]early identical to claim 1.” (*Id.* at 78). This difference, then, does not necessarily resolve the matter.

What does strike me as significant is the fact that the *Xactware* decisions centered on an aspect of EagleView's inventions that is not at issue here. Looking first to *Xactware I*, it is apparent that the Court evaluated the six asserted patents "as a whole." 358 F. Supp. 3d at 406-07. Most of those patents related to the correlation of non-stereoscopic (i.e., non-3-D) aerial roof images to generate a three-dimensional model of the roof. *See id.* at 407-08. Accordingly, the Court found that the claims at issue were "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." *Id.* at 407. The Court relied on that correlation function in determining that the claims survived *Alice* step one. *See id.* at 409. It did so again at *Alice* step two. *See id.* at 410.

The same is true of *Xactware II*. That case involved all but one of the patents involved in *Xactware I*. *Xactware II*, 485 F. Supp. 3d at 510. The Court, again examining the asserted patents as a group, *id.* at 517-18, found that EagleView's claims "present a solution ... to the method of climbing up on the roof" by "having the computer correlate two non-stereoscopic views of different sections of a roof." *Id.* at 518. The Court's step-one analysis relied on this characterization of the claims, *see id.*, and although the Court did not reach step two, it indicated that its step-two analysis would echo the analysis in *Xactware I*. *Id.* at 518 n. 9.

In contrast to *Xactware*, in which the majority of the patents at issue involved the correlation of multiple images, here, none of them do. In particular, as EagleView has acknowledged, there is nothing in claim 1 of the '840 patent involving two different non-

stereoscopic aerial views. (Tr. at 67). I am therefore unpersuaded by the *Xactware* Court’s reasoning with respect to the patent-eligibility of claim 1 of the ’840 patent.²

Thus, for the foregoing reasons, I conclude that claim 1 of the ’840 patent is directed to an abstract idea.

2. *Alice* Step 2

Claim 1 of the ’840 patent does not recite an inventive concept. As discussed above, the claim elements are, individually, conventional. EagleView points to the fact that the claim discloses an “entirely new” alternative to traditional roof measurement methods. (D.I. 22 at 22). What, however, is the inventive concept here? I agree with Roofr that EagleView’s opposition brief is unclear on this point. (See D.I. 23 at 9). If the purported inventive concept stems from the automation of traditional roofing methods, then that is not enough; a patent that simply proposes “doing it on the computer” is abstract, even if automation has brought significant advances to the industry. See, e.g., *Univ. of Fla. Research Found., Inc. v. Gen. Elec. Co.*, 916 F.3d 1363, 1367 (Fed. Cir. 2019).

Another possibility is that the purported inventive concept stems from the translation of a two-dimensional image to a three-dimensional model, as EagleView suggested at oral argument. (E.g., Tr. at 75). Nothing in claim 1 explicitly requires the model to be three-dimensional; in fact, the model may be two-dimensional. EagleView concedes this: (*Id.* at 70). It argues, however, that

² For similar reasons, I am unpersuaded by the Court’s opinion in *Eagle View Techs. v. GAF Materials, LLC.*, No. 2:22-215-TS-DAO (D. Utah Dec. 12, 2022), which EagleView submitted as subsequent authority. (D.I. 26-1, Ex. 1). There, the ’840 patent was one of nine patents before the Court. (*Id.* at 1). The Court analyzed them together and, in holding that the asserted claims were non-abstract, found that “the claims are directed to methods and processes of constructing a 3D model from two photographs to facilitate roof repair or replacement.” (*Id.* at 6). Thus, the *GAF Materials* decision, like the *Xactware* decision, centered on an aspect of the asserted claims that is not at issue here.

the claim's pitch determination marker element requires three dimensions—perhaps because calculating measurements from an image necessarily involves incorporating the angle at which the image was taken. (*See id.* at 71-73). In any event, claim 1 does not disclose any specific method for how one translates two-dimensional information to three-dimensional information; it merely recites the desired results. The same is true of the other two patents, which EagleView suggests reflect the same innovation. (*See, e.g., id.* at 31-32, 35).³

This goes to the primary concern that drives the § 101 analysis: the monopolization of abstract intellectual concepts. *See Mayo*, 566 U.S. at 70. EagleView may not monopolize the abstract idea of deriving three-dimensional measurements from two-dimensional images. The fact that each claim is limited to the roofing context is immaterial; “[L]imiting the claims to [a] particular technological environment ... is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core.” *Elec. Power*, 830 F.3d at 1355.

Consequently, I conclude that claim 1 of the '840 patent is not directed to an inventive concept. I therefore GRANT Roofr's motion to dismiss claim 1 of the '840 patent.

³ I therefore reject EagleView's argument that the conventionality of this innovation represents an unresolved fact question that I cannot consider on a motion to dismiss. (*See* D.I. 24-25). EagleView cannot avoid dismissal “simply by reciting in the complaint that the invention at issue is novel and nonconventional.” *British Telecommc 'ns PLV v. IAC/InterActiveCorp.*, 381 F. Supp. 3d 293, 322-23 (D. Del. 2019). To preclude dismissal, EagleView must offer “detailed factual allegations raising issues of fact.” *Id.* at 10. Asserting an inventive concept without tethering it to the claims does not suffice. The same is true of EagleView's argument with respect to the conventionality of the predominant pitch algorithm. (*See* D.I. 22 at 17).

IV. CONCLUSION

I grant Roofr's motion to dismiss claim 1 of each of the asserted patents. I deny the motion, without prejudice to raising the same arguments at summary judgment, as to the other 60 claims in the asserted patents.

An appropriate order will issue.