

CASE NO.: CV 16-00457 SJO (KKx) DATE: June 21, 2016

TITLE: Coffelt v. NVIDIA Corp. et al.

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PRESENT: THE HONORABLE S. JAMES OTERO, UNITED STATES DISTRICT JUDGE

Victor Paul Cruz Not Present
Courtroom Clerk Court Reporter

COUNSEL PRESENT FOR PLAINTIFF: COUNSEL PRESENT FOR DEFENDANTS:

Not Present Not Present

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PROCEEDINGS (in chambers): ORDER GRANTING DEFENDANTS' MOTION TO DISMISS PURSUANT TO FED. R. CIV. P. 12(b)(6) FOR LACK OF PATENTABLE SUBJECT MATTER UNDER 35 U.S.C. § 101 [Docket No. 34]

This matter is before the Court on Defendants NVIDIA Corp. ("NVIDIA"), Autodesk, Inc. ("Autodesk") and Pixar's (collectively, "Defendants") Motion to Dismiss Pursuant to Fed. R. Civ. P. 12(b)(6) for Lack of Patentable Subject Matter Under 35 U.S.C. § 101 ("Motion"), filed May 13, 2016. Plaintiff Louis A. Coffelt, Jr. ("Plaintiff"), proceeding *pro se*, opposed the Motion ("Opposition") on May 20, 2016, and Defendants replied ("Reply") on June 6, 2016.¹ The Court found this matter suitable for disposition without oral argument and vacated the hearing set for June 20, 2016. See Fed. R. Civ. P. 78(b). For the following reasons, the Court **GRANTS** Defendants' Motion.

I. FACTUAL AND PROCEDURAL BACKGROUND

Plaintiff initiated the instant patent infringement action against Defendants on March 14, 2016, alleging infringement of U.S. Patent No. 8,614,710 (the "'710 Patent").² (See *generally* Compl., ECF No. 1.) Defendants now move to dismiss Plaintiff's Complaint, arguing that each of the claims of the '710 Patent are directed to abstract ideas implemented on generic computers, and as such, are invalid under 35 U.S.C. § 101 ("Section 101") and *Alice Corp. Pty. Ltd. V. CLS Bank Int'l*, — U.S. —, 134 S. Ct. 2347 (2014). (See *generally* Mot., ECF No. 34-1.) Plaintiff opposes

¹ Plaintiff filed a "Reply to Defendants Reply" on June 9, 2016. (See Pl.'s Reply to Defs. Reply, ECF No. 41.) Local Rule 7-10, however, provides that "[a]bsent prior written order of the Court, the opposing party shall not file a response to the reply." L.R. 7-10. As Plaintiff is proceeding *pro se*, the Court has considered its contents.

² Although the instant action was initially assigned to the Honorable Beverly Reid O'Connell, it was reassigned to this Court on March 16, 2016. (See Order to Reassign Case, ECF No. 8.)

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the Motion, arguing that the claims of the '710 Patent are not directed to an abstract idea, but that even if they were, there is a sufficient "inventive concept" to transform the claims into patent-eligible inventions. (See *generally* Opp'n, ECF No. 38.)

The '710 Patent, which issued on December 24, 2013 to Plaintiff, is directed to a method of selecting a color for a portion of a digital image by calculating and comparing various vectors within a specific region of space, known as a "steradian." (See Compl., Ex. 1 ("'710 Patent") at Abstract, cols. 2:37-39, 13-14.) The '710 Patent contains one independent claim—claim 1—and five dependent claims. (*Id.*) Claim 1 reads in its entirety:

1. A method for deriving a pixel color comprising the steps of:
 - a **computer calculating** a first position vector for a geometric graphic object;
 - a **computer calculating** a particular steradian region of space;
 - a **computer calculating** a particular steradian radius of said steradian region of space;
 - a **computer calculating** that said second position vector is located in said particular steradian region of space;
 - a **computer calculating** that said second position vector is located in said particular steradian region of space;
 - a **computer calculating** a length of said first position vector
 - a **computer calculating** a length of said second position vector;
 - a **computer comparing** said first length to said second length;
 - for a first pixel, a **computer deriving** a pixel color for said first position vector from a result of said length comparison;
 - for a second pixel, a **computer deriving** a pixel color for said second position vector from a result of said length comparison

(*Id.* [formatting altered and emphasis added].)

The prosecution history of the '710 Patent reveals that on January 25, 2013, an Examiner for the United States Patent and Trademark Office ("PTO") rejected each of the four then-pending claims in part because they were directed to non-statutory subject matter under Section 101 and the Supreme Court's decision in *Bilski v. Kappos*, 561 U.S. 593 (2010). (See Req. for Judicial Notice

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in Supp. Mot. ("RJN"), Ex. A Part 1 ("Prosecution History, pt. 1") at 81-82, ECF No. 32-1.)³ In particular, the Examiner wrote that

[i]n the instant invention, a pixel color is derived mathematically using vectors in a particular steradian region. The calculation claimed can be done by a human mentally or with a pen and paper. There **is no machine claimed for performing the calculations**, nor do the claims inherently require one.

(Prosecution History, pt. 1 at 81-82 [emphasis added].)

In response to this rejection, on March 7, 2013, Plaintiff amended his claims to include a limitation that the methods outlined in the claims would be performed by a "machine." (Prosecution History, pt. 1 at 90-98.) On May 23, 2013, the Examiner rejected these amended claims for still being directed to non-statutory subject matter, noting that "[t]here is no **specific** machine claimed for performing the calculations, nor do the claims inherently require one." (RJN, Ex. A Part 2 ("Prosecution History, pt. 2") at 9, ECF No. 32-2 [emphasis in original].) On June 1, 2013, Plaintiff again amended his claims, replacing each instance of the word "machine" with the word "computer." (Prosecution History, pt. 2 at 17-26.) This amendment prompted the Examiner to issue an Advisory Action on July 5, 2013 stating that "Applicant's reply has overcome the . . . 35 USC 101 rejection of claims 1 and 2." (Prosecution History, pt. 2 at 28.)

II. DISCUSSION

In their Motion, Defendants argue that each of the claims of the '710 Patent is not patent-eligible under Section 101 because such claims are directed to an abstract idea—a mathematical algorithm—without adding any inventive concept. (See Mot. 6.) Plaintiff responds that Defendants have failed to meet their burden of proving patent-ineligibility, as Defendants (1) have not explained how "a particular steradian region of space" is abstract; and (2) have ignored the specification and exhibits in their arguments regarding "inventive concept." (See *generally* Opp'n.) With counsel's arguments laid out, the sets forth the legal standards governing motions to dismiss on Section 101 grounds.

³ The Court takes judicial notice of the prosecution history of the '710 Patent pursuant to Federal Rule of Evidence 201(b)(2), as it is a public record that "consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1317 (Fed. Cir. 2005); see also 37 C.F.R. § 1.11(a) (2010) ("The specification, drawings, and **all papers relating to the file of**: A published application; a patent; or a statutory invention registration are open to inspection by the public. . . .") (emphasis added). What's more, Plaintiff does not object to or in any way oppose Defendants' request.

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A. Legal Standards

1. Legal Standard for Motion to Dismiss

In reviewing a motion to dismiss under Rule 12(b)(6), a court may consider the complaint, documents attached to the complaint, documents incorporated by reference in the complaint, and matters of judicial notice. See *United States v. Ritchie*, 342 F.3d 903, 908 (9th Cir. 2003) (citation omitted). A court accepts the plaintiff's factual allegations in the complaint as true and construes them in the light most favorable to the plaintiff. See *Shwarz v. United States*, 234 F.3d 428, 435 (9th Cir. 2000) (citation omitted). "Dismissal can be based on the lack of a cognizable legal theory or the absence of sufficient facts alleged under a cognizable legal theory." *Balistreri v. Pacifica Police Dep't*, 901 F.2d 696, 699 (9th Cir. 1990) (citation omitted).

Rule 12(b)(6) must be read in conjunction with Federal Rule of Civil Procedure 8(a), which requires "a short and plain statement of the claim showing that the pleader is entitled to relief." *Ileto v. Glock Inc.*, 349 F.3d 1191, 1200 (9th Cir. 2003) (citation omitted). "While legal conclusions can provide the framework of a complaint, they must be supported by factual allegations." *Ashcroft v. Iqbal*, 556 U.S. 662, 679 (2009). To plead sufficiently, a plaintiff must proffer "enough facts to state a claim to relief that is plausible on its face." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007). "A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged." *Iqbal*, 556 U.S. at 678 (citation omitted).

A document filed *pro se* is "to be liberally construed." See *Estelle v. Gamble*, 429 U.S. 97, 106 (1976). A *pro se* complaint, "however inartfully pleaded, must be held to less stringent standards than formal pleadings drafted by lawyers" and can only be dismissed for failure to state a claim if it appears "beyond doubt that the plaintiff can prove no set of facts in support of his claim which would entitle him to relief." *Haines v. Kerner*, 404 U.S. 519, 520-21 (1972) (citation omitted). Coffelt filed his Complaint *pro se*; thus, his Complaint will be liberally construed.

2. Section 101 Analytical Framework

"Section 101 defines the subject matter that may be patented under the Patent Act." *Bilski v. Kappos*, 561 U.S. 593, 601 (2010). Section 101 reads in its entirety: "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. "Section 101 thus specifies four independent categories of inventions or discoveries that are eligible for patent protection: processes, machines, manufactures, and compositions of matter." *Bilski*, 561 U.S. at 601.

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Although acknowledging that "[i]n choosing such expansive terms . . . Congress plainly contemplated that the patent laws would be given wide scope," the Supreme Court long ago identified three exceptions to Section 101: "laws of nature, physical phenomena, and abstract ideas." *Diamond v. Chakrabarty*, 447 U.S. 303, 308-09 (1980). Although these exceptions are not required by the statutory text, they are consistent with the idea that certain discoveries "are part of the storehouse of knowledge of all men" and are "free to all men and reserved exclusively to none." *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948). Thus, "the concern that drives this exclusionary principle [is] one of pre-emption." *Alice Corp. Pty. Ltd. v. CLS Bank Intern.*, 134 S. Ct. 2347, 2354 (2014). Consequently, the Supreme Court has required that "[i]f there is to be invention from such a discovery, it must come from the application of the law of nature to a new and useful end." *Funk Bros.*, 333 U.S. at 130.

Alice Corp. v. CLS Bank ("Alice") represents the Supreme Court's latest effort to clarify how courts should apply these difficult principles. In *Alice*, the Supreme Court expanded on the two-step approach for resolving Section 101 issues first articulated in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. —, 132 S. Ct. 1289, 1296-97 (2012). First, a court must "determine whether the claims at issue are directed to one of those patent-ineligible concepts." *Alice*, 134 S. Ct. at 2355 (citing *Mayo*, 566 U.S. at —, 132 S. Ct. at 1296-97). If so, then the court must ask "[w]hat else is there in the claims," which requires consideration of "the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Id.* (citing *Mayo*, 132 S. Ct. at 1297-98). In this second step, the court must "search for 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.'" *Id.* (citing *Mayo*, 132 S. Ct. at 1294). This two-step analytical framework has been labeled the "*Alice/Mayo* test."

Nevertheless, "Judges of this Court have recognized that the two steps of the *Alice/Mayo* test are easier to separate in recitation than in application." *Ameranth, Inc. v. Genesis Gaming Solns., Inc.*, No. CV 11-00189 AG, 2014 WL 7012391, at *2 (C.D. Cal. Nov. 12, 2014) (internal citations omitted). Another court in this district has stated that "[d]escribing this as a two-step test may overstate the number of steps involved." *Eclipse IP LLC v. McKinley Equip. Corp.*, No. CV 14-00742 GW, 2014 WL 4407592, at *2-*3 (C.D. Cal. Sept. 4, 2014).

As a result, identifying whether a claim is "directed to an abstract idea" under step one of the *Alice/Mayo* test is not always a simple undertaking. Although there is some disagreement among courts as to how expansively a claim should be examined at *Alice/Mayo* step one, the Federal Circuit and courts in this district require that a court examine the *purpose* of a challenged claim to determine whether it is abstract. See *Cal. Inst. Tech. v. Hughes Commc'ns, Inc.*, 59 F. Supp. 3d 974, 991 (C.D. Cal. 2014) (requiring that a court "identify the purpose of the claim—in other words, what the claimed invention is trying to achieve—and ask whether that purpose is abstract," making the *Alice/Mayo* step 1 "a sort of 'quick look' test, the object of which is to identify a risk of

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preemption and ineligibility"); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1258-59 (Fed. Cir. 2014) (although blurring steps one and two in analyzing internet-based patent claims, finding the claims not patent-ineligible where they "specify how interaction with the Internet are manipulated to yield a desired result—a result that overrides the routine and conventional sequence of events ordinarily triggered by the click of the hyperlink").

In instances in which the "purpose" of the claim can be considered "abstract," the patent-eligibility analysis becomes more difficult during the second step of the *Alice/Mayo* test. In *Alice*, the Supreme Court considered whether "[t]he introduction of a computer into the claims" directed toward the abstract idea of intermediated settlement was sufficient to "transform the nature of the claim" by adding an "inventive concept." *Alice*, 134 S. Ct. at 2358. The Supreme Court held that it did not, and made clear that "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Id.* "Nor is limiting the use of an abstract idea 'to a particular technological environment.'" *Id.* (citing *Bilski*, 561 U.S. at 610-11). In its discussion, the Supreme Court in *Alice* distinguished an earlier case, *Diamond v. Diehr*, in which the Court held that a computer-implemented process for curing rubber, which employed a "well-known" mathematical equation, was nevertheless patent-eligible because it used that equation in a process designed to solve a technological problem in "conventional industry practice."⁴ *Alice*, 134 S. Ct. at 2358 (citing *Diehr*, 450 U.S. at 177-178).

Lower courts have not been left without any guidance, however. With respect to the "abstract ideas" exception, the Supreme Court has stated that the prohibition embodies "the longstanding rule that '[a]n idea of itself is not patentable.'" *Benson*, 409 U.S. at 67 (quoting *Rubber-Tip Pencil Co. v. Howard*, 20 Wall. 498, 507 (1874)). Following this rule, the Supreme Court has found that claims drawn to mathematical formulae, algorithms, and fundamental economic practices such as intermediated settlement and risk hedging to be directed to "abstract ideas" even where such claims contained computer elements. See *Benson*, 409 U.S. at 71-72 (finding an algorithm for converting binary-coded decimal numbers into pure binary form in a general-purpose digital computer to be "in practical effect . . . a patent on the algorithm itself" and therefore an abstract idea); *Parker v. Flook*, 437 U.S. 584, 594-595 (1978) (finding a mathematical formula for computing "alarm limits" in a catalytic conversion process to be an abstract idea); *Alice*, 134 S. Ct. at 2356 ("On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk."); *Bilski*, 561 U.S. at 611 (finding a patent claiming a "series of steps instructing how to hedge risk" not patent eligible because hedging is a "fundamental economic practice").

⁴ In particular, the Supreme Court in *Diehr* explained that the claimed contribution to the art was the step of "constantly measuring the actual temperature inside the mold" for the synthetic rubber products. *Diehr*, 450 U.S. at 178, 179 n.5.

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Indeed, the Court of Appeals for the Federal Circuit has had occasion to grapple with Section 101 issues in the wake of *Alice*. Although the Court stops well short of proclaiming that Section 101 presents any sort of bright line, these cases appear to distinguish between patents claiming improvements to modern technology and those claiming well-known concepts untethered to any particular technology or technological environment. Compare *DDR Holdings*, 773 F.3d at 1258 (finding eligible under Section 101 a patent claiming a method for retaining visitors on a website through the creation of a digital "store within a store," both because "the claims recite an invention that is not merely the routine or conventional use of the Internet," and also because the claims "do not attempt to preempt every application of the idea of increasing sales by making two web pages look the same," but rather claim an "inventive concept for resolving [a] particular internet-centric problem"), with *Ultramercial, LLC v. WildTangent, Inc.*, 772 F.3d 709 (Fed. Cir. 2014) (finding patent-ineligible claims involving the display of an advertisement in exchange for access to copyrighted media, where the limitations "simply instruct the practitioner to implement the abstract idea with routine, conventional activity" and where the "invocation of the Internet also adds no inventive concept"), cert. denied, 135 S. Ct. 2907 (2015); *Planet Bingo, LLC v. VKGS LLC*, 576 Fed. App'x 1005 (Fed. Cir. 2014) (finding patent-ineligible claims reciting methods and systems for "managing a game of Bingo" where the claimed computer elements—"a computer with a central processing unit," "a memory," "an input and output terminal," "a printer," possibly "a video screen," and a "program . . . enabling the steps of managing a game of bingo" perform steps of selecting, storing, and retrieving two sets of numbers, assigning a player identifier and a control number, and comparing a winning set of bingo numbers with a selected set of bingo numbers—simply recite a generic computer implementation of the covered abstract idea).

With this fundamental understanding of the purpose and limits of Section 101, the Court addresses whether a motion to dismiss may properly be brought on Section 101 grounds.

3. Appropriateness of Ruling on Section 101 Motions at the Pleadings Stage

"Patent eligibility under [Section] 101 is a question of law that may, in appropriate cases, be decided on the pleadings without the benefit of a claim construction hearing." *Modern Telecom Sys. LLC v. Earthlink, Inc.*, No. CV 14-0347 DOC, 2015 WL 1239992, at *6 (C.D. Cal. Mar. 17, 2015) (citing *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, 776 F.3d 1343, 1349 (Fed. Cir. 2014) (affirming district court's decision to grant motion to dismiss based on patent-ineligible subject matter under Section 101 without having a claim construction hearing); *Ultramercial*, 772 F.3d at 711 (same)). However, "it will ordinarily be desirable—and often necessary—to resolve claim construction disputes prior to a [Section] 101 analysis, for the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter." *Bancorp Servs., L.L.C. v. Sun Life Assurance. Co. Can. (U.S.)*, 687 F.3d 1266,1273-74 (Fed. Cir. 2012); see also *Content Extraction*, 776 F.3d at 1349 ("Although the determination of patent eligibility requires a full understanding of the basic character of the claimed

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subject matter, claim construction is not an inviolable prerequisite to a validity determination under [Section] 101.").

4. Defendant's Burden

"Although the clear and convincing evidence standard is not applicable" to a Section 101 motion brought pursuant to Federal Rule of Civil Procedure 12(b)(6), the movant "still bear[s] the burden of establishing that the claims are patent-ineligible under [Section] 101." *Modern Telecom Systems*, 2015 WL 1239992, at *8. "Additionally, in applying [Section] 101 jurisprudence at the pleading stage, the Court construes the patent claims in a manner most favorable to Plaintiff." *Id.* (citing *Content Extraction*, 776 F.3d at 1349).

B. Analysis

Having determined that the Court can rule on Defendants' Motion at the pleadings stage, the Court now applies the *Alice/Mayo* test to determine whether the claims of the '710 Patent are patent-ineligible.

1. Step 1: Whether the Claims are Directed to a Patent-Ineligible Abstract Idea

The first step in analyzing whether a claim satisfies Section 101 is determining whether the claim at issue is directed to a "patent-ineligible concept" such as an abstract idea, algorithm or mathematical formula. *Alice*, 134 S. Ct. at 2355. Defendants argue that "[t]he steps recited in method claim 1 merely express a mathematical algorithm." (Mot. 7.) They contend that the steps of claim 1 only explain how to calculate two vectors, calculate a steradian region, determine whether those vectors are located in that steradian region, compare the length of the vectors and then use that information to derive color information for the two vectors. (Mot. 7-8.) Defendants point to language in the specification defining the results of these steps as "a mathematical relationship" and "mathematical calculations." (Mot. 7-8.)

Defendants further contend that the prosecution history of the '710 Patent confirms that claim 1 is directed to a mathematical algorithm. (Mot. 10.) In particular, they point out that the PTO rejected claim 1 as abstract because the "calculations claimed can be done by a human mentally or with a pen and paper." (Mot. 10 (quoting Prosecution History, pt. 1 at 81-82.)) Defendants add that after Plaintiff amended his claims to require a "machine" to accomplish the steps, the PTO again rejected the claims on the grounds that "[t]here is no **specific** machine claimed for performing the calculations, nor do the claims inherently require one." (Mot. 10 (quoting Prosecution History, pt. 2 at 9 (emphasis in original).)) Defendants further argue that although the '710 Patent issued after Plaintiff replaced the word "machine" with "computer" to accomplish the steps in claim 1, the Examiner's implied reason for allowance directly contravenes the Supreme

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Court's ruling in *Alice*. (Mot. 11 (citing *Alice*, 134 S. Ct. at 2358 ("[T]he mere recitation of a generic computer cannot transform a patent ineligible abstract idea into a patent eligible invention."))).

Plaintiff does little to rebut these contentions. Instead, Plaintiff goes to great lengths to argue that "[s]pace is not abstract," (Opp'n 18), but is instead "a region, and real object, we all exist in," (Opp'n 8). Plaintiff relies on the contentions that space "exists literally" and that the computer calculations in claim 1 "bring[] a particular steradian . . . into existence" to support his assertion that claim 1 is directed to "Real Objects" rather than to an abstract idea. (See generally Opp'n.) The critical flaw with this argument, however, is that the '710 Patent does not claim "space." Instead, it claims methods of calculating a **region** of space and **comparing** various calculations to choose a pixel color. ('710 Patent at cols. 2:66-3:2.) Moreover, Plaintiff's declaration that claim 1 references "Real Physical Objects," (see Opp'n 6), does little to convince the Court that the claimed method is directed to anything but a mathematical algorithm,⁵ see *In re TLI Commc'ns LLC Patent Litig.*, — F.3d —, 2016 WL 2865693, at *3 (Fed. Cir. May 17, 2016) ("However, not every claim that recites concrete, tangible components escapes the reach of the abstract-idea inquiry.").

The Court concludes that the steps recited in claim 1 are directed to an abstract, mathematical algorithm. As the Examiner noted, "[i]n the instant invention, a pixel color is derived mathematically using vectors in a particular steradian region. The calculations claimed can be done by a human mentally or with a pen and paper. There is no [specific] machine claimed for performing the calculations, nor do the claims inherently require one." (Prosecution History, pt. 1 at 81-82.). "A method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101." *Cybersource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011).

Claims 2 through 6, which depend on claim 1, recite additional steps of calculating other mathematical relationships involving the steradian region. Thus, all of the dependant claims are directed to the same type mathematical algorithm outlined in claim 1. As such, all of the claims in the '710 Patent are directed to a mathematical algorithm.

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⁵ Plaintiff mischaracterizes the nature of the claims within the '710 Patent in another way. While a user may use the steps outlined in the '710 Patent to create "a particular steradian region of space" or "a steradian radius," (Opp'n 6), the patented steps comprise **calculations** of these dimensions rather than the creation of the space or radius.

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2. Step 2: Whether the Claims Include an "Inventive Concept" Sufficient to "Transform the Nature of the Claim" into a Patentable Invention

Having determined that the claims of the '710 Patent are directed to an abstract mathematical algorithm for calculating and comparing regions in space, the Court now "examine[s] the limitations of the claims to determine whether the claims contain an 'inventive concept' to 'transform' the claimed abstract idea into patent-eligible subject matter." *Ultramercial II*, 772 F.3d at 715 (quoting *Alice*, 134 S. Ct. at 2357). "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].'" *Alice*, 134 S. Ct. at 2357 (quoting *Mayo*, 132 S. Ct. at 1298). Importantly, the "mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Alice*, 134 S. Ct. at 2358.

Defendants contend that the claim elements, when viewed individually and as an "ordered combination," lack an inventive concept sufficient to render the asserted claims patent-eligible, as "the claims do nothing more than state the abstract idea to be applied using a generic 'computer.'" (Mot. 12.) Plaintiff responds by noting that the '710 Patent includes a "full, concise, and exact description" of the inventive step. (Opp'n 3.) However, Plaintiff proceeds to simply introduce and define the term "steradian." Absent from this explanation is any indication that the **claims** add to the underlying mathematical algorithm used to calculate and compare those steradians. While the '710 Patent claims methods for calculating steradian regions, it does not claim the steradian itself.⁶

Plaintiff argues that the '710 Patent's "inventive concept" is evidenced by the fact that the software built around the '710 Patent accomplishes things that the industry has struggled to do for many years. (Opp'n 4.) Although this might be true, that an invention may be new, useful, or lucrative does not demonstrate that the invention is thus eligible for patent protection under Section 101. *See Flook*, 437 U.S. at 591 ("T]he novelty of the mathematical algorithm is not a determining factor [in Section 101 analysis] at all.") Indeed, "[a] claim for an improved method of calculation, even when tied to a specific end use, is unpatentable subject matter under § 101." *Id.* at 595 n. 18. Although Plaintiff might have discovered a new and useful mathematical formula, "the discovery of such a phenomenon cannot support a patent unless there is some other inventive concept in its application." *Id.* at 594.

The Court concludes that the asserted claims lack sufficient "additional features" to transform the mathematical algorithm into a patent-eligible invention. Although claim 1 requires the use of a

⁶ Indeed, Plaintiff cannot claim the steradian. From Plaintiff's own concessions in the prosecution history, the steradian is a well-known mathematical principle, discovered well before the filing of this patent application.

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"computer," there are no limitations placed on the hardware or software required to be used in the claimed methods or systems. *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333-34 (Fed. Cir. 2012) ("Simply adding a 'computer aided' limitation to a claim covering an abstract concept, without more, is insufficient to render the claim patent eligible."). In particular, the claims themselves do not contain any limitations regarding specific hardware or software that must be used to perform the claimed methods, and the specification provides that "[o]bviously, the mathematical calculations set forth herein may be executed by various computer programming languages." ('710 Patent col. 5:21-23.) "Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of 'additional featur[e]' that provides any 'practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.'" *Alice*, 134 S. Ct. at 2358 (quoting *Mayo*, 132 S. Ct. at 1297).

F. Conclusion

On its face, the methods claimed in the '710 Patent are unpatentable under 35 U.S.C. § 101 because they recite merely a series of mathematical calculations that can be used to create a steradian region. That the claims require the use of a generic computer to perform those calculations does not constitute a sufficient "inventive concept" to transform the abstract nature of the claims into patent-eligible inventions. The claims of the '710 Patent are expressly prohibited under *Alice*, *Mayo*, and their progeny.

III. RULING

For the foregoing reasons, the Court **GRANTS** Defendants' Motion to Dismiss. This matter shall close.

IT IS SO ORDERED.