

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

KAAVO INC.,)	
)	
Plaintiff,)	
)	
v.)	Civil Action No. 14-1192-LPS-CJB
)	
COGNIZANT TECHNOLOGY)	
SOLUTIONS CORPORATION,)	
)	
Defendant.)	
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KAAVO INC.,)	
)	
Plaintiff,)	
)	
v.)	Civil Action No. 14-1193-LPS-CJB
)	
TIER 3, INC., APPFOG, INC. and SAVVIS)	
COMMUNICATIONS CORPORATION,)	
)	
Defendants.)	
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REPORT AND RECOMMENDATION

Presently pending before the Court are a motion to dismiss for failure to state a claim pursuant to Rule 12(b)(6) of the Federal Rules of Civil Procedure, filed by Defendants Tier 3, Inc. (“Tier 3”), AppFog, Inc. (“AppFog”), and Savvis Communications Corporation (“Savvis”), and a motion for judgment on the pleadings pursuant to Rule 12(c), filed by Defendant Cognizant Technology Solutions Corporation (“Cognizant”). (D.I. 19;¹ D.I. 14, Civil Action No. 14-1192-LPS-CJB) Defendants argue that all of the claims of Plaintiff Kaavo Inc.’s (“Plaintiff”) United

¹ Defendant Cognizant adopted the arguments made in the other Defendants’ briefs, adding only a few additional unique arguments of its own to those made by Tier 3, AppFog and Savvis. (D.I. 14 at 2, Civil Action No. 14-1192-LPS-CJB) For this reason, citations herein are to the docket in Civil Action No. 14-1193-LPS-CJB unless otherwise noted.

States Patent No. 8,271,974 (the “974 patent”) are directed to non-patent-eligible subject matter pursuant to 35 U.S.C. § 101 (“Section 101”). For the reasons that follow, the Court recommends that Defendants’ motions (the “Motions”) be GRANTED-IN-PART and DENIED-IN-PART.

I. BACKGROUND

A. Factual Background

The '974 patent is entitled “Cloud Computing Lifecycle Management for N-tier Applications.” (D.I. 26, ex. A (the “974 patent”) at 1) According to its Abstract, the patent relates to “[m]ethods, devices, and systems for management of a cloud computing environment for use by a software application.” (*Id.*)

As set forth in the patent, a cloud computing environment consists of resources, such as datacenters, that are operated by a cloud provider. (*Id.*, col. 1:21-29) Those resources are used to provide users with access to applications or services, such as “web portal[s] with email functionality, database programs, word processing programs, accounting programs, inventory management programs, [or] numerical analysis programs[.]” (*Id.*, cols. 1:21-29, 5:12-21)

The cloud computing environments set forth in the patent are described as “N-tier computing environment[s].” (*Id.*, col. 1:56-57) An “N-tier” cloud computing environment is described in the specification as one that includes multiple tiers, where each tier performs a particular function, and each tier may be made up of multiple servers (which may be virtual² or physical servers, and which may be located in multiple different datacenters). (*Id.*, cols. 3:47-49 (describing “server” as used in the patent), 5:22-51) One example of such a system is shown in

² As described in one portion of the patent, a “virtual” computer system is one that does not directly correspond to a physical system. (’974 patent, col. 16:52-53)

Figure 3:

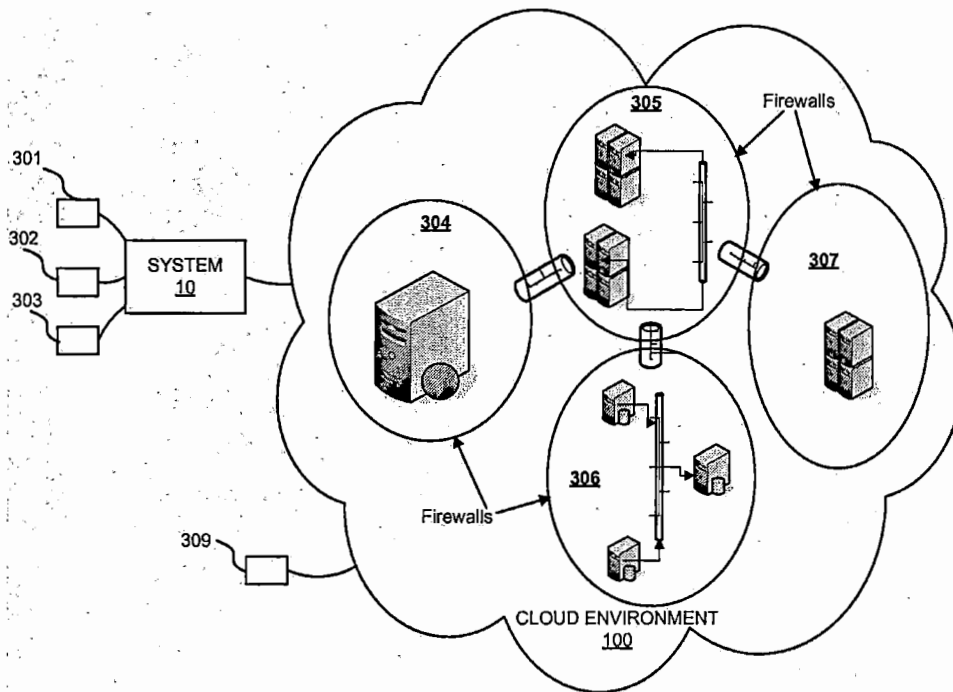


FIG. 3

(*Id.*, col. 10:21-51) Figure 3 reflects a cloud environment that includes several tiers, identified as 304, 305, and 306. (*Id.*, col. 10:38-40) In this possible configuration, the embodiment's tiers include a load balancer (304), an application server cluster (305), and a database cluster (306).³ (*Id.*, col. 10:40-46) The application server and database clusters each include servers from two different datacenters. (*Id.*) The tiers are interconnected, and the user can customize the security between the tiers. (*Id.*, col. 10:38-51) Figure 3 also shows System 10, a computer that is used to manage the cloud environment, (*id.*, col. 10:21-25), and box 309, which represents remote users who access the application (such as a web site) that is hosted by the cloud environment, (*id.*, col.

³ The computer identified as 307 is a monitoring module that monitors the tiers. ('974 patent, cols. 10:47-49, 14:19-33)

10:31-33).

B. Procedural Background

Plaintiff initiated these two actions on September 15, 2014. (D.I. 1) On September 19, 2014, Chief Judge Leonard P. Stark referred the cases to this Court to resolve any and all matters with regard to scheduling, as well as any motions to dismiss, stay and/or transfer venue. (D.I. 5)

In Civil Action No. 14-1192-LPS-CJB, Cognizant filed its Rule 12(c) motion on February 3, 2015. (D.I. 14, Civil Action No. 14-1192-LPS-CJB) In Civil Action No. 14-1193-LPS-CJB, after Plaintiff filed an Amended Complaint on January 8, 2015, (D.I. 15), and a Second Amended Complaint on January 16, 2015, (D.I. 18), Tier 3, AppFog and Savvis filed the pending Rule 12(b)(6) motion on February 2, 2015, (D.I. 19). Briefing was completed on the Motions on March 2, 2015, (D.I. 29), and oral argument was held on May 27, 2015, (D.I. 41 (hereinafter, “Tr.”)).

The Court held a Case Management Conference in both cases on March 23, 2015. (D.I. 35) Thereafter, it granted a motion to stay filed by Defendants, (D.I. 21), staying both actions pending resolution of the Motions, (D.I. 38).

II. LEGAL STANDARDS

A. Standard of Review Regarding a Rule 12 Motion that Challenges Patent Eligibility Pursuant to Section 101

Pursuant to Rule 12(b)(6), a party may move to dismiss the plaintiff’s complaint based on the failure to state a claim upon which relief can be granted. Fed. R. Civ. P. 12(b)(6).⁴ The

⁴ The standard for review of a Rule 12(c) motion for judgment on the pleadings—the type of motion that Cognizant has filed here—is the same as that for deciding the Rule 12(b)(6) motion to dismiss filed by Tier 3, AppFog and Savvis. *See Merck Sharp & Dohme Corp. v. Teva Pharms. USA, Inc.*, C.A. No. 14-874-SLR-SRF, 2015 WL 4036951, at *5 (D. Del.

sufficiency of pleadings for non-fraud cases is governed by Federal Rule of Civil Procedure 8, which requires “a short and plain statement of the claim showing that the pleader is entitled to relief[.]” Fed. R. Civ. P. 8(a)(2). In order to survive a motion to dismiss pursuant to Rule 12(b)(6), “a complaint must contain sufficient factual matter, accepted as true, to state a claim to relief that is plausible on its face.” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (internal quotation marks and citation omitted). In assessing the plausibility of a claim, the court must “construe the complaint in the light most favorable to the plaintiff, and determine whether, under any reasonable reading of the complaint, the plaintiff may be entitled to relief.” *Fowler v. UPMC Shadyside*, 578 F.3d 203, 210 (3d Cir. 2009) (internal quotation marks and citation omitted).

Here, however, the Rule 12(b)(6) motion is used to assert an affirmative defense. Specifically, Defendants assert that Plaintiff failed to allege infringement of a patentable claim pursuant to Section 101. (D.I. 19) In that scenario, dismissal is permitted only if the well-pleaded factual allegations in the Complaint, construed in the light most favorable to the plaintiff, suffice to establish the defense. *See Jones v. Bock*, 549 U.S. 199, 215 (2007); *Kabbaj v. Google, Inc.*, Civ. No. 13-1522-RGA, 2014 WL 1369864, at *2 n.2 (D. Del. Apr. 7, 2014); *see also Genetic Techs. Ltd. v. Agilent Techs., Inc.*, 24 F. Supp. 3d 922, 927 (N.D. Cal. Mar. 7, 2014).

Patentability under Section 101 is a “threshold inquiry” and a question of law. *In re Bilski*, 545 F.3d 943, 950-51 (Fed. Cir. 2008), *aff’d*, *Bilski v. Kappos*, 561 U.S. 593 (2010). Yet this question of law is also one that “may be informed by subsidiary factual issues.” *CyberFone*

July 1, 2015); *see also* (D.I. 14 at 2 n.1, Civil Action No. 14-1192-LPS-CJB). Thus, below, the Court will not further distinguish between Cognizant’s Rule 12(c) motion and the other Defendants’ Rule 12(b)(6) motion.

Sys., LLC v. Cellco P'ship, 885 F. Supp. 2d 710, 715 (D. Del. 2012) (citing *In re Comiskey*, 554 F.3d 967, 976 (Fed. Cir. 2009)). Some judges of the United States Court of Appeals for the Federal Circuit have suggested that “any attack on an issued patent based on a challenge to the eligibility of the subject matter must be proven by clear and convincing evidence[.]” *CLS Bank Int'l v. Alice Co. Pty. Ltd.*, 717 F.3d 1269, 1304-05 (Fed. Cir. 2013) (Rader, J., concurring-in-part and dissenting-in-part), but at least one other member of that Court has come to the opposite conclusion, see *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 720-21 (Fed. Cir. 2014) (“*Ultramercial III*”) (Mayer, J., concurring). All of this has led to some uncertainty regarding the appropriate standard of proof in Section 101 cases. See *Intellectual Ventures I LLC v. Symantec Corp.*, 100 F. Supp. 3d 371, 379-80 (D. Del. 2015) (citing cases). However, even to the extent that the “clear and convincing” standard of proof is applicable to Section 101 challenges, it would apply only to the resolution of factual disputes, and not to resolution of pure issues of law. See *TriPlay, Inc. v. WhatsApp Inc.*, Civil Action No. 13-1703-LPS, 2015 WL 1927696, at *3-5 (D. Del. Apr. 28, 2015) (citing cases), *adopted in all substantive respects*, 2015 WL 4730907 (D. Del. Aug. 10, 2015); see also *Affinity Labs of Tex., LLC v. Amazon.com, Inc.*, No. 6:15-CV-0029-WSS-JCM, 2015 WL 3757497, at *5 (W.D. Tex. June 12, 2015). And as to the instant Motions, filed at the pleading stage (a stage at which any facts that might be in dispute are to be construed in the light most favorable to the plaintiff), the “clear and convincing” standard of proof should not come into play at all. See *Blue Spike, LLC v. Google, Inc.*, Case No. 14-cv-01650-YGR, 2015 WL 5260506, at *4 (N.D. Cal. Sept. 8, 2015); *Shortridge v. Found. Constr. Payroll Serv., LLC*, Case No. 14-cv-04850-JCS, 2015 WL 1739256, at *7 (N.D. Cal. Apr. 14, 2015); *Modern Telecom Sys. LLC v. Earthlink, Inc.*, No. SA CV 14-0347-DOC, 2015 WL

1239992, at *7-8 (C.D. Cal. Mar. 17, 2015).⁵

B. Need for Claim Construction

There is no hard-and-fast rule that a court must construe terms in the claims at issue before it performs a Section 101 analysis. *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1273-74 (Fed. Cir. 2012) (“[W]e perceive no flaw in the notion that claim construction is not an inviolable prerequisite to a validity determination under [Section] 101.”). In some cases, claim construction is unnecessary. *See, e.g., Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App’x 988, 992-93 & n.1 (Fed. Cir. 2014) (holding that a patent claim was subject matter ineligible under Section 101, where the district court did not engage in claim construction, and where the plaintiff “d[id] not explain which terms require construction or how the analysis would change”). In other cases, such as when a Section 101 motion would be well-taken even were a plaintiff’s proposed claim construction to be accepted, a court may adopt the plaintiff’s construction (or the construction most favorable to the plaintiff) for the purposes of the motion. *See Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1349 (Fed. Cir. 2014); *Genetic Techs. Ltd. v. Lab. Corp. of Am. Holdings*, Civil Action No. 12-1736-LPS-CJB, 2014 WL 4379587, at *5-6 (D. Del. Sept. 3, 2014) (citing cases). Alternatively, if the Court determines that formal claim construction is

⁵ In its answering brief, Plaintiff relies on the Federal Circuit’s opinion in *Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335 (Fed. Cir. 2013) (“*Ultramercial IP*”), in part to set out the appropriate standard of review. (D.I. 26 at 5, 14, 19, 20) That opinion has been vacated, however, and the Federal Circuit’s subsequent opinion in the case reversed its prior decision in *Ultramercial II. Ultramercial III*, 772 F.3d at 711-12, *cert. denied sub nom., Ultramercial, LLC v. WildTangent, Inc.*, 135 S. Ct. 2907 (2015). As such, *Ultramercial II* lacks precedential effect, and the Court will not consider it here. *See TriPlay, Inc.*, 2015 WL 1927696, at *4 n.3 (describing the differences between these *Ultramercial* decisions).

necessary, it may decline to rule on a Rule 12 motion prior to engaging in claim construction, *see, e.g., Loyalty Conversion Sys. Corp. v. Am. Airlines, Inc.*, 66 F. Supp. 3d 829, 834-35 (E.D. Tex. 2014) (Bryson, J., sitting by designation), or it may deny the motion without prejudice to the movant's ability to renew it as a summary judgment motion after claim construction proceedings have concluded, *see Execware, LLC v. BJ's Wholesale Club, Inc.*, C.A. No. 14-233-LPS, 2015 WL 5734434, at *2-3 (D. Del. Sept. 30, 2015).

C. Considerations Relevant to Deciding a Rule 12 Motion that Challenges the Eligibility of Multiple Patent Claims, Based on the Analysis of a Single Representative Claim

In *Cronos Techs., LLC v. Expedia, Inc.*, C.A. No. 13-1538-LPS, 2015 WL 5234040 (D. Del. Sept. 8, 2015), our Court noted “several considerations relevant to deciding a Rule 12 motion that challenges the patent eligibility of multiple patent claims based on analysis of a single representative claim.” 2015 WL 5234040, at *2. The *Cronos* Court set out these considerations as follows:

First, are all non-representative claims adequately represented by the representative claim (i.e., do *all* of the challenged claims relate to the *same* abstract idea and do any of the non-representative claims add one or more inventive concepts that would result in patent eligibility)? Second, are there issues of claim construction that must be decided before resolving the motion? Finally, is there *any* set of facts that could be proven relating to preemption, questions of patentability, or whether the claims “solve a technological problem,” that would result in a determination that one [] or more of the claims are patent-eligible?

Id. (citations and footnotes omitted) (certain emphasis in original); *see also Execware*, 2015 WL 5734434, at *2.

III. DISCUSSION

A. Patentable Subject Matter

Patent-eligible subject matter is defined in Section 101 of the Patent Act:

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. In choosing such expansive terms “modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope.” *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980).

Yet while the scope of Section 101 is broad, there is an “important implicit exception [to it]: [l]aws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) (internal quotation marks and citation omitted); *see also Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012). “Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, [because] they are the basic tools of scientific and technological work.” *Prometheus*, 132 S. Ct. at 1293 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

The Supreme Court of the United States has also recognized, however, that “too broad an interpretation of this exclusionary principle could eviscerate patent law.” *Id.*; *see also Alice*, 134 S. Ct. at 2354. This is because “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Prometheus*, 132 S. Ct. at 1293; *see also Alice*, 134 S. Ct. at 2354. To that end, it has explained that “an *application* of a law of nature, [natural phenomena or abstract idea] to a known structure or process may well be

deserving of patent protection.” *Diamond v. Diehr*, 450 U.S. 175, 187 (1981) (emphasis in original).

In terms of the process used to analyze patent eligibility under Section 101, the Federal Circuit has explained that a court should first identify whether the claimed invention fits within one of the four statutory classes set out in the statute: processes, machines, manufactures, and compositions of matter. *Ulramercial III*, 772 F.3d at 713-14. The court must then assess whether any of the judicially recognizable exceptions to subject matter eligibility apply, including whether the claims are to patent-ineligible abstract ideas. *Id.* at 714.⁶

In *Alice*, the Supreme Court confirmed the framework to be used in order to distinguish patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts:

First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts. . . . If so, we then ask, “[w]hat else is there in the claims before us?” . . . To answer that question, we consider 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. . . . We have described step two of this analysis as a 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.”

Alice, 134 S. Ct. at 2355 (quoting *Prometheus*, 132 S. Ct. at 1294-98) (citations omitted; alterations in original); *see also Parker v. Flook*, 437 U.S. 584, 594 (1978). Since *Alice*, the Federal Circuit has recognized that “[d]istinguishing between claims that recite a patent-eligible

⁶ With regard to the instant Motions, it is not disputed that the claims at issue fit within one of the four statutory classes set out in Section 101, and so the entirety of the Court’s analysis below will be on whether the claims are to patent-ineligible abstract ideas.

invention and claims that add too little to a patent-ineligible abstract concept can be difficult, as the line separating the two is not always clear.” *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1255 (Fed. Cir. 2014).

B. Claim 1

The Court will first examine claim 1 of the '974 patent, which Defendants assert is substantially identical to the remaining three independent claims. (D.I. 20 at 18) Claim 1 covers:

1. A method for managing a cloud computing environment for use by a software application comprising:

- [(1)] determining a requested initial cloud environment based on user-defined provisioning information, where the requested initial cloud environment is not yet instantiated and is an N-tier computing environment;
- [(2)] sending an initialization event based on the requested initial cloud environment, where the initialization event is configured to cause an initial cloud environment configuration to be made available to an application;
- [(3)] sending application data that is configured to cause the application to begin execution in the initial cloud environment configuration;
- [(4)] receiving monitoring environment data that represents a current cloud environment state;
- [(5)] determining a requested adjusted cloud environment based on the monitoring environment data, where the requested adjusted cloud environment is an N-tier computing environment; and
- [(6)] sending a cloud environment adjustment event based on the requested adjusted cloud environment, where the cloud environment adjustment event is configured to cause an adjusted cloud environment configuration to be made available to the application.

(’974 patent, col. 18:44-67) The claim thus describes a method for managing a cloud computing environment for use by a software application that is composed of six steps.

1. Alice’s Step One

The first step of the analysis is to determine whether the claim is “directed to [a] patent-ineligible concept[]”—in this case, an abstract idea. *Alice*, 134 S. Ct. at 2355; *Ultraercial III*, 772 F.3d at 714. Defendants assert that claim 1 is directed to an abstract idea, and they frame that idea as the concept of “setting up and managing a computing environment.” (D.I. 20 at 7; Tr. at 11; *see also* D.I. 14 at 3, Civil Action No. 14-1192-LPS-CJB (Cognizant asserting that the claims can be seen as directed to “the long-known idea of resource management in a computing environment”))⁷ Defendants liken the elements of the claim to “general and long-known concept[s]” within the area of computer resource management: “a specific set of resources is selected; after the resources are deployed, data representing the status of those resources is received; and based on the status of deployed resources, adjustments are made.” (D.I. 20 at 8).

Is “setting up and managing a computing environment”—or, more accurately is it relates to this claim and this patent, “setting up and managing a cloud computing environment”—an

⁷ Defendants, at times, suggest in their briefing that the abstract idea at issue should be framed in an even more broad way. For example, Defendant Cognizant offers that the patent’s claims “can also be viewed as being directed to the abstract idea of managing a network environment”—an idea that it says could have been implicated in the management of “a telegraph network of the 1860s, a telephone network of the 1950s, or the public internet network that existed long before the '974 patent was filed[.]” (D.I. 14 at 3, Civil Action No. 14-1192-LPS-CJB) And Defendants AppFog, Tier 3 and Savvis occasionally articulated the abstract idea at issue as “the conventional business practice of a resource management process” or the “fundamental practice of managing resources”—one utilized in the areas of “hotel manage[ment] . . . management of an assembly line process, warehouse facilit[ies] and many other circumstances[.]” (D.I. 20 at 1, 8) The Court agrees with Plaintiff, (D.I. 26 at 9), that to frame the abstract idea in these broad ways would be overly simplistic. The claims (and indeed, the patent) are all about cloud computing environments and ways of managing cloud computing environments; claim 1 itself includes multiple references to terms that relate to computing (and not, for example, to the use of the telegraph or to hotel management). To say that claim 1 could be directed to an abstract idea that is divorced from management of a computing environment would be wrong, as it would stray too far from the actual wording of the claim. (Tr. at 8-9 (counsel for Defendants AppFog, Tier 3 and Savvis ultimately stating at oral argument that the abstract idea should be framed as “setting up and managing a computing environment”))

abstract idea in the first place? The Supreme Court has explained that the “‘abstract ideas’ category embodies ‘the longstanding rule that [a]n idea of itself is not patentable.’” *Alice*, 134 S. Ct. at 2355 (quoting *Gottschalk*, 409 U.S. at 67) (certain quotation marks omitted). The abstract idea can be, but need not amount to, a “‘preexisting, fundamental truth[.]’” about the natural world “that has always existed[.]” or a “method of organizing human activity” (such as a “longstanding commercial practice”). *Id.* at 2356-57 (internal quotation marks and citations omitted); *see also DDR Holdings*, 773 F.3d at 1256; *cf. CLS Bank*, 717 F.3d at 1286 (explaining that a claim directed to an abstract idea is one directed to a “disembodied concept . . . a basic building block of human ingenuity, untethered from any real-world application”) (internal quotation marks and citation omitted). Beyond that, the concept of an “abstract idea” has not been crisply defined. *Alice*, 134 S. Ct. at 2357 (declining to “labor to delimit the precise contours of the ‘abstract ideas’ category”); *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1331 (Fed. Cir. 2015) (recognizing that application of the abstract idea concept can be difficult, “a problem inherent in the search for a definition of an ‘abstract idea’ that is not itself abstract”).

The Court concludes that “setting up and managing a cloud computing environment” does, in fact, amount to an abstract idea. The concept implicates an idea “having no particular concrete or tangible form” and that is “devoid of a concrete or tangible application.” *Ultramercial III*, 772 F.3d at 715; *see also Intellectual Ventures I, LLC v. Motorola Mobility LLC*, 81 F. Supp. 3d 356, 366 (D. Del. 2015) (describing the abstract idea at issue as “distributing software updates to a computer” and finding that the claims at issue were directed to this idea).

From here, can it be said that claim 1 is “directed to” this abstract idea? A recent

decision from the Federal Circuit sheds light on how to assess this question. In *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343 (Fed. Cir. 2015), the Federal Circuit applied step one of *Alice*, considering the claims “in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.” *Id.* at 1346. With this approach in mind, the Federal Circuit attacked *Alice*’s step one by looking to the patent specification’s description of the invention in order to “ascertain[] the basic character of the subject matter” of the patent. *Id.* at 1348. The *Internet Patents* Court identified “the character of the claimed invention” at issue as “the idea of retaining information in the navigation of online forms[,]” due to a statement in the specification that “[t]he most important aspect of . . . the present invention is . . . that it maintains data state across all [browser] panes [containing data inputted by a user].” *Id.* (citation omitted). Chief Judge Stark has also relied on this form of analysis from *Internet Patents* in assessing *Alice*’s first step, see *Execware*, 2015 WL 5734434, at *4, and so will the Court here.⁸

In doing so, the Court concludes that the claim is directed to the abstract idea at issue, as “setting up and managing a cloud computing environment” really does amount to the “basic character” of the patent’s subject matter. Were that not evident from the content of claim 1 itself,⁹ it would be understood by reading the patent’s specification, which, in describing what the

⁸ See also *Affinity Labs of Texas, LLC v. DirecTV, LLC*, 109 F. Supp. 3d 916, 924-25 (W.D. Tex. 2015) (citing *Internet Patents* and assessing whether the “basic character” of the patent amounted to an abstract idea); see also *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, — F. Supp. 3d —, 2015 WL 5165442, at *2 (D. Md. Sept. 2, 2015) (same).

⁹ The language of the claim manifests what the Court believes to be the claim’s “basic character.” The claim is infused with broad, functional language that describes a process by which a cloud computing environment is initiated, monitored and adjusted. This is seen in the description of the process of determining an initial cloud computing environment based on user specifications (step 1), establishing that environment with the desired functionality (steps 2 and 3), and subsequently monitoring the environment in order to make beneficial changes (steps 4-6).

patent is all about, consistently uses the same broad phraseology—that referring to methods, systems and devices for management of a cloud computing environment. (*See, e.g.*, '974 patent at Abstract (“Methods, devices, and systems for management of a cloud computing environment for use by a software application.”); *id.*, col. 1:6-10 (“The present methods, devices, and systems relate generally to the fields of computers, information technology, virtualization, and cloud computing. More particularly, the present methods, devices, and systems relate to management of a cloud computing environment for use by a software application.”))

In the portion of its briefing addressing *Alice*'s step one, Plaintiff makes two basic arguments in an attempt to show why claim 1 does not fail *Alice*'s first step. (D.I. 26 at 11) Neither were persuasive to the Court.

First, Plaintiff notes that “each independent claim of the '974 patent restricts the field of invention to a cloud computing environment” and is “particular to the management of cloud computing systems[,]” such that the patent’s claims cannot be said to be directed to “a longstanding commercial practice of the type at issue in *Alice*[.]” (*Id.*; *see also* Tr. at 61) Plaintiff’s position here seems to be that “[m]anagement of cloud computing environments [have] only recently emerged as a technological innovation[,]” and are not as “longstanding” a commercial practice as other forms of computing system or resource management. (D.I. 26 at 11-12) But nowhere have courts concluded that a patent claim *cannot* be directed to an abstract idea if the claim relates to a field that is of somewhat recent vintage. *Cf. Internet Patents*, 790 F.3d at 1348 (concluding that the “idea of retaining information in the navigation of online forms” is abstract); *Cloud Satchel, LLC v. Amazon.com, Inc.*, 76 F. Supp. 3d 553, 562-63 (D. Del. 2014) (finding that a claim was directed at its “core” to the “abstract idea of cataloguing

documents to facilitate their retrieval from storage in the field of remote computing”). The overriding question at step one is whether the claim is directed to an *idea* that lacks a concrete or tangible form—and both “setting up and managing a computing environment” and “setting up and managing a cloud computing environment” would easily fit that bill.

Second, Plaintiff asserts that “the claimed technology necessitates the use of discrete computer hardware and software components configured to enable performance of the specified functions carried out in the context of managing cloud computing networks.” (D.I. 26 at 12) However, in its briefing, Plaintiff did not explain what language in claim 1 referred to the aforementioned “discrete hardware and software components[.]” At oral argument, the Court repeatedly pressed Plaintiff’s counsel on this point, asking counsel to identify where, in the claim, such components were said to be found and what they were said to require. (Tr. at 57-59, 67-69) Plaintiff’s counsel eventually replied that there was “specific hardware” that was “implied” in claim 1 through the claim’s references to a “cloud environment” or an “N-tier computing environment.” (*Id.* at 67-68) But counsel provided no further articulation as to what “specific hardware” it was referring to, or why any “implied” reference to such hardware would alter the step one analysis the Court has set out above. (*Id.*)¹⁰ In its step two analysis, the Court will further assess these claim terms and what impact they have on the question of patent eligibility. But for now, in light of the claim’s and the specification’s focus on the general

¹⁰ Defendants, for their part, originally contended that claim 1 does not even require a computer, as “the steps can all be carried out by a human” operator. (*See, e.g.*, D.I. 20 at 7-8, 12) Plaintiff disagreed and asserted that the claims cannot be performed by a human alone. (D.I. 18 at ¶ 20; Tr. at 73) In light of that disagreement, the Court will adopt Plaintiff’s proposed “construction,” as even Defendants agree it must for purposes of resolving these Motions. (Tr. at 36-37, 73)

process of setting up and managing a cloud computing environment, the Court need only conclude that any particularity conveyed by these terms would not alter its conclusion that the abstract idea at issue connotes the “basic character” of the claim. *Internet Patents*, 790 F.3d at 1348; *cf. Cloud Satchel*, 76 F. Supp. 3d at 562-63 (finding that the “length or specificity of the” representative claim, which related to the “abstract concept of ‘storage and retrieval of electronic documents[,]’” did not “prevent the claim[] from fundamentally reciting an abstract idea where, as here, the claim language does nothing more than describe the contours of the cataloguing process”).

Under the analysis set out above, claim 1 is directed to an abstract idea.

2. *Alice*’s Step Two

Step two of the *Alice* framework asks whether the claims contain an “inventive concept,” meaning “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*, 134 S. Ct. at 2355 (internal quotation marks and citation omitted). The purpose of the “inventive concept” requirement is to “ensure that the claim is more than a drafting effort designed to monopolize the abstract idea.” *Alice*, 134 S. Ct. at 2357 (internal quotation marks, citation, and brackets omitted).

Neither “limiting the use of an abstract idea to a particular technological environment[,]” nor simply stating an abstract idea and adding the words “apply it with a computer[,]” will transform an abstract idea into a patent-eligible invention. *Id.* at 2358 (internal quotation marks and citations omitted). And the additional elements within the claim, apart from the abstract idea itself, must involve more than “‘well-understood, routine, conventional activit[ies]’ previously

known to the industry.” *Id.* at 2359 (quoting *Prometheus*, 132 S. Ct. at 1294); *see also Prometheus*, 132 S. Ct. at 1300 (“[S]imply appending conventional steps, specified at a high level of generality, to . . . abstract ideas cannot make those . . . ideas patentable.”). The *Alice* Court held that, based on these principles, “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. “Given the ubiquity of computers,” it said, “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.’” *Id.* (quoting *Prometheus*, 132 S. Ct. at 1297).

a. Claim 1 Lacks an Inventive Concept

With these principles in mind, the Court concludes that claim 1 lacks the requisite element or combination of elements that would be sufficient to ensure that the claim amounts to something more than the abstract idea of “setting up and managing a cloud computing environment[.]” Claim 1, on its face, does not appear to specify any meaningful, particularized technological or procedural limitations on that idea. (974 patent, col. 18:44-67) Put another way, the words of claim 1 appear to contain almost “no restriction on how” the claim’s six “determining,” “sending” or “receiving” steps are to be accomplished; the claim simply appears to “describe[] the [sought-after] effect or result” of the steps. *Internet Patents*, 790 F.3d at 1348; *see also Loyalty Conversion Sys. Corp.*, 66 F. Supp. 3d at 838 (finding a claim to be patent ineligible where it invoked “a purely functional limitation[, but] neither the limitation nor anything in the specification provides any detail as to how that function is performed”); (Tr. at 16-17).

Neither does the patent's specification suggest that the claim's limitations are infused with any meaningful particularity. Instead, for example, the specification continually emphasizes that no particular hardware or software are required to carry out the claimed management process:

The present embodiments are not limited to the architecture of FIG. 4 or 5. For example, any suitable processor-based device may be utilized including without limitation, . . . personal data assistants (PDAs), computer game consoles, and multi-processor servers. Moreover, the present embodiments may be implemented on application specific integrated circuits (ASIC) or very large scale integrated (VLSI) circuits. In fact, persons of ordinary skill in the art may utilize any number of suitable structures capable of executing logical operations according to the described embodiments.

('974 patent, cols. 11:60-12:3) The patent goes on to state that:

Some (up to all) of the steps described in the sections above may be implemented using a computer having a processor (e.g. one or more integrated circuits) programmed with firmware and/or running software. Some (up to all) of the steps described in the sections above may be implemented using a distributed computing environment, which is one example of a computer system. Some (up to all) of the steps described in the sections above may be implemented using a virtual computer system (a virtual machine), where the virtual computer environment does not have a one-to-one correspondence with a physical computer environment.

(*Id.*, col. 16:43-54) Using generic computing technology to practice the abstract idea is insufficient to make claim 1 patent eligible. *Cf. Alice*, 134 S. Ct. at 2358 (“[I]f a patent's recitation of a computer amounts to a mere instruction to implement an abstract idea on . . . a computer . . . that addition cannot impart patent eligibility.”) (internal quotation marks, brackets and citation omitted); *see also* (D.I. 20 at 14 (Defendants asserting that “claim 1 amounts to nothing significantly more than an instruction to apply the abstract idea of setting up and

managing a computing environment using some unspecified, generic software.”)).

b. Plaintiff’s Contrary Arguments are Unavailing

Thus, after assessing claim 1 pursuant to the *Alice* step two analysis, the Court has come to the conclusion that the claim does not contain an inventive concept. But as part of this process, it has also repeatedly looked to Plaintiff—both in the briefing and at oral argument—and asked Plaintiff to point out why that conclusion is not correct. Plaintiff did make several arguments in this regard. But as the Court will set out below, it has found those arguments to either be clearly insufficient under the law, or to be so underdeveloped that the Court could not meaningfully assess the strength of the argument in the first place.

1. “Cloud environment” and “N-tier computing environment”

First, as previously noted, Plaintiff suggested for the first time at oral argument that claim 1 contains reference to particular hardware or software components that are necessary to the claimed method and that bear on the question of eligibility. (Tr. at 57-58, 67-69) Specifically, Plaintiff pointed to the claim’s “implied” reference to “specific hardware” through the use of the terms “cloud environment” or “N-tier computing environment.” (*Id.* at 67-68) Yet Plaintiff said little more than this. For example, Plaintiff was unable: (1) to articulate what “specific hardware” is said to be associated with such terms; (2) to provide any plausible claim construction for the terms that included reference to such hardware; or (3) to give any other indication as to why the claim’s use of the two terms suggests the presence of the requisite inventive concept. (*Id.* at 68-70)¹¹ If a defendant brings a Rule 12 motion that appears at first

¹¹ Indeed, when asked at an earlier point in oral argument what was Plaintiff’s view of the definition of an “N-tier comput[ing] environment[,]” Plaintiff’s counsel said that a “tier” is

blush to be meritorious, in order to justify denial of that motion, the Court will often look to rely on specific arguments from the respondent that help explain why such a denial is warranted.

Plaintiff failed to provide that here with regard to the claim's use of these two terms.¹²

2. The Second Amended Complaint's Allegations Regarding the Existence of an Inventive Concept

Plaintiff next argues that the Second Amended Complaint ("SAC") in Civil Action No. 14-1193-LPS-CJB alleges facts demonstrating that the '974 patent contains an inventive concept—and that these allegations, when credited, should suffice to withstand the Motions. (D.I. 26 at 14-15) Plaintiff refers here in significant part to the allegations in paragraphs 15, 16, and 17 of the SAC.¹³

Paragraph 15 states that the '974 patent “provides an inventive concept and does not claim

a “logical grouping of implements directed to a *general-type functionality*,” and that “N-tier” simply refers to “one or more tiers.” (Tr. at 42-43 (emphasis added); *see also* '974 patent, col. 5:28-30)

¹² It is worth noting that in a related action involving the '974 patent, Plaintiff submitted proposed claim constructions of these two terms in a Joint Claim Construction Chart. (D.I. 69 at 1-4, Civil Action No. 14-353-LPS) There, Plaintiff proposed that a “cloud environment” means “potentially accessible resources such as datacenters and/or other information technology-related capabilities operated by a cloud provider[.]” (*Id.* at 1 (citing '974 patent, cols. 1:21-29, 5:52-6:2, 9:1-5 & FIG. 1)) It also jointly agreed with the defendant in the case that an “N-tier computing environment” is “a computing environment with one or more tiers” and that a “tier” is a “logical grouping of components directed to a general type of functionality[.]” (*Id.* at 3-4) Nothing in these proffered constructions suggests to the Court that these two terms implicate anything other than wholly generic computer technology, or that such generic technology is said to work together with regard to the method at issue in a way that demonstrates the existence of an inventive concept.

¹³ Plaintiff also makes reference to the allegations in paragraphs 18 and 19 of the SAC. (D.I. 26 at 15-16) These allegations relate to the issue of preemption, a subject the Court takes on more specifically in subsection III.B.2.b.3. Thus, the Court will address those paragraphs of the SAC more particularly in that subsection.

an abstract idea[]” and then (citing to the patent’s specification) asserts that the patent “improv[es] the function of a computer system.” (D.I. 18 at ¶ 15) However, the portion of this paragraph asserting that the patent “provides an inventive concept and does not claim an abstract idea[]” simply amounts to the articulation of a legal conclusion. The remainder of the paragraph, in attempting to bolster the assertion that the patent “improv[es] the functioning of a computer system” cites to portions of column 1 of the patent’s specification. Yet, those portions of column 1 do not discuss the alleged inventiveness of the method for managing a cloud environment set forth in claim 1, nor how such a method purportedly “improv[es] the efficient “functioning” of that environment. Instead, they appear to merely summarize, in a very general way, what cloud computing is and how cloud computing may be used to “leverage” “[v]irtualization technology” or “virtual servers[.]” (’974 patent, col. 1:12-15, 22-26 & 27-30 (*cited in* D.I. 18 at ¶ 15)) The Court does not see how touting the benefits of cloud computing generally can amount to sufficient support for Plaintiff’s argument that the patent’s *claims* contain an inventive concept.¹⁴

Plaintiff next claims that paragraphs 16 and 17 of the SAC “specifically identify the components of the claimed system” that demonstrate the existence of the requisite inventive concept. (D.I. 26 at 15) Paragraph 16, however, simply states that a “key and inventive component of the ’974 patent is the claimed management system, methods, and devices for managing a cloud computing environment to ensure reliability and optimal performance.” (D.I. 18 at ¶ 16) This, again, really amounts to little more than the articulation of a bare legal

¹⁴ Put differently, the fact that (as Plaintiff’s counsel asserted at oral argument) cloud computing may be more beneficial than a “traditional infrastructure”-based approach to managing data (due, for example, to the fact that it is “less expensive than the traditional approach”), (Tr. at 43-45), has very little to do with whether the *particular method for setting up and managing a cloud computing environment* set out in claim 1 passes muster under *Alice*.

conclusion, devoid of plausible factual support. In other words, the SAC's drafter simply included an assertion about what the patent covers at a general level ("the claimed management system, methods and devices for managing a cloud computing environment") and then christened this a "key and inventive component[]" due to unspecific assertions regarding the patent's impact on "reliability" or "performance."

As for paragraph 17, it simply states that the "claims of the '974 patent set forth the primary requirements of the" systems, methods and devices described in the patent, and then appears to re-state the language found in claim 13 of the '974 patent. (*Id.* at ¶ 17 (citing '974 patent, col. 20:12-36)) Claim 13 is a system claim (a "system for managing a cloud computing environment"). It states that the requisite system comprises a processor in communication with a memory, with the processor being configured to execute certain steps—the very same steps described in claim 1's method claim. Re-arranging the words of claim 13 and including them in paragraph 17 of the SAC is not the same thing as pleading facts making out a plausible claim of patent eligibility. Moreover, neither paragraph 17 nor Plaintiff's briefing articulates how the addition of the processor in claim 13 would change the eligibility analysis that the Court has set out above as to claim 1.¹⁵

¹⁵ In its briefing and again at oral argument, Plaintiff cited to an order of the United States District Court for the Middle District of North Carolina in *Genetic Techs. Ltd. v. GlaxoSmithkline, LLC*, Case No. 1:12-CV-299-CCE-JLW (M.D.N.C. Aug. 22, 2014) ("*Genetic Techs.*"), in support of the proposition that the "well-supported allegations in its complaint must be taken as true on a motion to dismiss and are a basis for denying Defendants' motion[s.]" (D.I. 26 at 15; Tr. at 85) The *Genetic Techs.* Court determined that the complaint at issue had alleged "some facts which at least inferentially support th[e] allegation" that "the methods of the patents were neither routine nor conventional[,] and thus denied a motion to dismiss filed on Section 101 grounds. (D.I. 26, ex. B at 2-3) As an initial matter, it is worth noting that in a case in this Court, Chief Judge Stark granted a motion to dismiss, on Section 101 grounds, claim 1 of the same patent that was at issue in *Genetic Techs.* (United States Patent No. 5,612,179). *See*

For these reasons, the Court does not find the content of paragraphs 15-17 of the SAC to demonstrate the existence of a factual dispute that requires denial of the Motions.

3. Preemption

Plaintiff next argues that the '974 patent's claims were not "a drafting effort to monopolize the abstract idea" of setting up and managing a cloud computing environment, and do not unduly preempt all ways of doing so. (D.I. 26 at 15) In assessing preemption arguments like these, courts are mindful that the focus of *Alice*'s step 2 is not whether a claim containing an abstract idea preempts an entire field. Instead, a court assesses whether a claim "would risk disproportionately tying up the use of the underlying ideas[.]" *Alice*, 134 S. Ct. at 2354-55 (internal quotation marks and citation omitted); *see also Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) ("While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility."). The *Alice* Court explained that "patents that claim the building blocks of human ingenuity" risk such preemption, whereas claims "that integrate the building blocks into something more . . . pose no comparable risk[.]" *Alice*, 134 S. Ct. at 2354-55 (internal quotation marks, brackets and citations omitted); *see, e.g., Diehr*, 450 U.S. at 187 ("Rather, they seek only to foreclose from others the use of that equation in conjunction with all of the other steps in their claimed

Genetic Techs. Ltd. v. Bristol-Myers Squibb Co., 72 F. Supp. 3d 521, 531-34, 538 n.19 (D. Del. 2014). The basis for Chief Judge Stark's decision was that the patentee there failed to separate the unpatentable natural law referenced in the claim from a purportedly unconventional amplification technique also described in the claim. *Id.* at 532-33. And so, the level of detail in the relevant *Genetic Techs.* complaint may not have made a legal difference to the District Court here. But separate and apart from that, it is also worth noting that the *Genetic Techs.* complaint contains a far greater number of factual allegations regarding the asserted presence of an inventive concept, as compared to the allegations in the SAC here. (*See Genetic Techs.*, D.I. 73 at ¶¶ 15, 17, 23, 27-28, 29-30, 32)

process.”).

In assessing Plaintiff’s arguments here, it is important to start by again recognizing that claim 1 is saturated with references to broad, generalized steps, which appear on their face to require the implementation of basic computer functions. For example, steps 2, 3, and 6 recite the “sending” of information (i.e., an “initialization event[,]” “application data[,]” and a “cloud environment adjustment event”), while step 4 recites the receiving of information (i.e., “monitoring environment data”). (’974 patent, 18:50-58, 63-67) These acts of sending and receiving data would appear to be necessary to set up and manage almost any computing environment, including one involving cloud computing.¹⁶ Steps 1 and 5 similarly require the “determining” of either an “initial cloud environment” or an “adjusted cloud environment[.]” (*Id.*, col. 18:46-49, 59-62) Here again, reciting the step of “determining,” without describing a sufficiently specific way of doing the “determining,” would be simply to claim a well-known, generic function of computers. *See OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (concluding that “using a computerized system . . . to automatically determine an estimated outcome and setting a price” was well-understood, routine, and conventional activity) (internal quotation marks and citation omitted).

¹⁶ *See Ultramercial III*, 772 F.3d at 717 (determining that “the transfer of content between computers is merely what computers do and does not change the analysis” for purposes of the machine-or-transformation test); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.”); *see also Cloud Satchel*, 76 F. Supp. 3d at 564 (“Although the court understands plaintiff’s argument that the steps of ‘transmitting’ and ‘receiving’ may not have been conventional practices in the field of computing [at] the time of invention, these steps nonetheless do nothing more than recite functions that can be achieved by any general purpose computer without special programming.”) (internal quotation marks and citation omitted).

It is true that the claim does make reference to (1) determining a requested initial cloud environment based on certain “user-defined provisioning information”; and to (2) receiving certain “monitoring environment data” representing the cloud environment state, which is then used to determine an adjusted cloud environment. (’974 patent, col. 18:46-49, 59-62) Yet Plaintiff did not clearly suggest that inclusion of either of these two terms adds sufficient particularity to the claim. For example, in its briefing, Plaintiff never specifically mentions either term. It does at one point cite in its brief to paragraph 18 in the SAC—a paragraph that does include reference to the term “monitoring environment data.” (D.I. 26 at 15) But neither Plaintiff’s brief nor paragraph 18 includes any actual argument or explanation as to why the claim’s use of this term moves the needle for Section 101 purposes. Then at oral argument, for the first time, Plaintiff briefly suggested that the claim’s use of the other term—“user-defined provisioning information”—may be relevant to the Court’s Section 101 analysis. (Tr. at 88 (“Well, the determination based on the user-defined provisioning information, there’s an appendix in Column 17 and 18 of the patent that shows an example of code used for the user to find provision information [i.e., an example of a configuration file].”)) But Plaintiff’s counsel did not proffer any construction for that term, or explain its position further. And in looking to how the patent describes “user-defined provisioning information,” the breadth of the term seems readily apparent. The specification explains that such information “*include[s,]*” but is not limited to, information including “geographic preference . . . service level requirements . . . pricing information, tier definitions . . . security requirements . . . audit/backup requirements . . . and special monitoring/alert requests.” (’974 patent, col. 6:40-52; *see also id.*, col. 6:53-55 (“[A] configuration file may comprise all or a portion of the user-defined provisioning information.”))

(emphasis added))¹⁷ Without anything more from Plaintiff as to *why* the presence of these two terms in claim 1 merits denial of Defendants’ Motions (or why claim construction is required as to these terms), the Court does not see how denial is warranted as to this claim.

There are at least two other strands of argument that Plaintiff made relating to the issue of preemption. The Court addresses these below.

First, Plaintiff asserts that it has pleaded that Defendants “can set up and manage computer environments without infringing the '974 patent.” (D.I. 26 at 15) In support, Plaintiff cites the SAC, which identifies one specific alternative for setting up and managing a [cloud] comput[ing] environment: “additional resources can simply be allocated in the first instance, allowing for expansion of the application without adjusting the cloud environment.” (D.I. 18 at ¶ 18 (*cited in* D.I. 26 at 15)) Taken as true, this allegation in the SAC, at the very most, establishes that claim 1 may not preempt an entire field. But that is not the appropriate focus here, as avoiding complete preemption is not the standard. *Alice*, 134 S. Ct. at 2354-55; *see also Ariosa Diagnostics*, 788 F.3d at 1379; *Tenon & Groove, LLC v. Plusgrade S.E.C.*, C.A. No. 12-1118-GMS-SRF, 2015 WL 1133213, at *4 (D. Del. Mar. 11, 2015) (“Leaving open some avenues with which to practice the underlying idea, however, does not guarantee patent eligibility.”); *Money Suite Co. v. 21st Century Ins. & Fin. Servs, Inc.*, C.A. No. 13-984-GMS, 2015 WL 436160, at *5 (D. Del. Jan. 27, 2015) (“The availability of other possible computer-implemented methods—ones not using front-end network gateways—also does not assuage fears of blocking

¹⁷ For what it is worth, the patent also describes what “monitoring environment data” is in similarly broad terms. The patent states that “[m]onitoring data **230** may *include*, for example, data relating to CPU utilization, memory utilization, I/O utilization, [] other performance-related criteria[,]” and “security information[.]” (’974 patent, col. 8:40-48 (emphasis added))

further innovation.”). Instead, the focus is on whether the claim risks “*disproportionately* tying up the use of the underlying” abstract idea. *Alice*, 134 S.Ct. at 2354 (internal quotation marks and citation omitted). The Court is not persuaded that Plaintiff’s reference in the SAC to a single other example of how one might set up and manage a cloud computing environment warrants denial of Defendants’ Motions.

Second, Plaintiff points to the issuance of the '974 patent over cited prior art, asserting this “indicates that there is no issue of preemption”—i.e., that the '974 patent presented a much narrower solution for the management of a cloud computing environment than that called for in the prior art. (D.I. 26 at 2, 15; *see also* D.I. 18 at ¶ 19) In its briefing or in the SAC, however, Plaintiff said nothing more about what prior art, in particular, it was referring to. Nor did Plaintiff say anything about why any aspect of that prior art would help demonstrate that what is recited in claim 1 is but a narrow portion of the universe of methods for setting up and managing a cloud computing environment. At oral argument, the Court asked Plaintiff to provide additional insight as to what aspects of the prior art were relevant here, but Plaintiff did not do so with any specificity. (Tr. at 76-80) Again, in order to understand why there is a basis to deny Defendants’ Motions as to the “prior art” argument, the Court looks to the respondent to make the case in its briefing and at oral argument—to use those opportunities to point out *what it is* about the prior art that demonstrates the existence of a relevant fact issue regarding preemption. In the absence of such explanation, the Court does not have a basis here to find that there are a set of facts that could be proven relevant to preemption that would result in a determination that the claim is patent eligible. *See Cronos*, 2015 WL 5234040, at *2.

3. Conclusion

Claim 1 is patent-ineligible under the *Alice* test, as it is directed to an abstract idea and fails to contain an inventive concept.

C. The Remaining Claims

Defendants assert that the remaining independent claims—claims 13, 24, and 35—are substantially identical to independent claim 1. (D.I. 20 at 18-19) Defendants also argue that the dependent claims—claims 2-12, 14-23, 25-34, and 36-45—“either detail a specific application of the management techniques enumerated in the independent claims or add admittedly well-known steps to those claims.” (*Id.* at 4-5; *see also id.* at 19) In assessing the eligibility of the remaining patent claims, the Court will consider the factors, previously set out above in Section II.C, that the *Cronos* Court found to be relevant in undertaking such a review.

1. The independent claims

The Court first assesses the remaining independent claims. Defendants did address each of these claims individually in their briefing. (D.I. 20 at 18-19)

The first *Cronos* consideration is whether claim 1 adequately represents these three claims—that is, whether “*all* of the challenged claims relate to the *same* abstract idea and [whether] any of the non-representative claims add one or more inventive concepts that would result in patent eligibility[.]” *Cronos*, 2015 WL 5234040, at *2 (certain emphasis in original). Here, the Court can conclude that claim 1 is representative of claims 13, 24 and 35.

Claim 13 is a system claim that, as was previously noted, adds the use of a processor in communication with a memory, where the “memory stores processor-executable program code; and the processor is configured to be operative in conjunction with the processor-executable program code” to perform the steps of claim 1. (’974 patent, col. 20:8-36) Defendants assert that

these added limitations amount to the grafting of “conventional and generic computer hardware” onto what is called for by claim 1, which cannot amount to the inclusion of an inventive concept. (D.I. 20 at 18); *see also Alice*, 134 S. Ct. at 2360 (finding the system claims to be “no different from the method claims in substance” as the system claims simply added “a handful of generic computer components configured to implement the same idea”). Plaintiff does not specifically counter Defendant’s assertion in its briefing. And both the language of claim 13 and the content of the specification do not suggest that the claim’s inclusion of a “processor” or a “memory” (or its reference to the way that the processor operates or that the memory stores code) identifies the use of anything beyond the utilization of generic computer technology in a conventional way. (*See, e.g.*, '974 patent, col. 11:22-23 (“CPU **502** may be a general purpose CPU or microprocessor”); *id.*, col. 11:30-32 (“System **10** also may include Random Access Memory (RAM) **508**, which may be SRAM, DRAM, SDRAM, or the like.”); *id.*, col. 11:60-64 (“The present embodiments are not limited to the architecture of FIG. 4 or 5. For example, any suitable processor-based device may be utilized including without limitation, including personal data assistants (PDAs), computer game consoles, and multi-processor servers.”); *id.*, col. 16:43-46 (“Some (up to all) of the steps described in the sections above may be implemented using a computer having a processor (e.g., one or more integrated circuits) programmed with firmware and/or running software.”))

Claim 24 is a claim to a “tangible computer readable storage medium having usable program code executable to perform operations comprising” the steps of claim 1. (*Id.*, cols. 21:46-22:2) The addition here of what Defendants assert (and Plaintiff does not contest) to be reference to generic, computer-readable media cannot save the claim from ineligibility, for

substantially the same reasons as those set out above regarding claim 13. *See Alice*, 134 S. Ct. at 2353, 2360 (concluding that the addition of a computer-readable medium containing program code for performing the claimed method added nothing of substance to the underlying abstract idea).

Claim 35 requires a “tangible first computer readable storage medium having first computer usable program code” that “is executable to install second computer usable program code on a second computer readable medium” such that the second computer usable program code can perform the steps of claim 1. (’974 patent, col. 23:14-44) Defendants argue, (D.I. 20 at 19), that this drafting technique capturing the installation of the claimed software on a computer simply amounts to “[pre]-solution activity,” which is also not sufficient to transform an otherwise patent-ineligible abstract idea into patent-eligible subject matter.” *Ultramercial III*, 772 F.3d at 716 (citing *Prometheus*, 132 S. Ct. at 1298). Plaintiff again does not specifically respond, and the Court agrees with Defendant’s assertion.

The next *Cronos* factor is whether issues of claim construction must be decided before resolving a motion. *Cronos*, 2015 WL 5234040, at *2. As was noted above, although Plaintiff has occasionally made reference to an asserted need for claim construction with regard to terms used in claim 1, it ultimately either could not articulate how this would make a difference to the Court’s Section 101 analysis, or it suggested a construction that the Court adopted for purposes of its review. As to any additional terms in these three additional independent claims, however, Plaintiff has not suggested that claim construction is necessary.

The final *Cronos* consideration is whether any set of facts, if proven, would “result in the determination that one [] or more of the claims are patent-eligible[.]” *Id.* Such facts could relate

to questions of preemption, questions of patentability, or whether the claims are directed to a technological improvement rather than a generic computer implementation of an abstract idea.

Id. Plaintiff has not identified any set of facts particular to the unique terms in claims 13, 24, and 35 that would fit this bill—despite being on notice that Defendants were putting these three independent claims squarely at issue. (D.I. 20 at 18-19) The Court takes Plaintiff’s silence to confirm that claims 13, 24, and 35 do not raise any unique factual issues that would warrant postponement of a decision.

Accordingly, the Court concludes that claim 1 adequately represents claims 13, 24, and 35, which are similarly directed to patent-ineligible subject matter.

2. The dependent claims

The dependent claims detail certain methods, devices or systems that in some way make use of the type of process recited in claim 1. Dependent claims 2-11 involve various permutations of the method of claim 1, including, *inter alia*:

- Using a second cloud provider (claim 2); using multiple cloud configurations and initialization events (claim 3) and adjusting such configurations (claim 4);
- Using monitoring environment data to forecast future needs (claim 5) and costs (claim 6) (and doing so using “service level agreement” data (claim 7));
- Wherein user-defined provisioning information is determined through the use of a needs analysis algorithm (claim 8), or where such information comprises geographic data (claim 9), or comprises service level agreement data (claim 10);
- Adjusting the cloud environment using “security information” (claim 11).

The dependent claims for the remaining independent claims mirror claims 2-11. Using the

analysis from *Cronos*, the Court must determine whether claim 1 adequately represents all of these remaining independent claims.

With respect the first *Cronos* consideration, Defendants assert that claims 2-11 (and the remaining dependent claims that mirror them) do nothing to “limit the scope of claim 1 in a way that transforms the abstract method of starting and managing a computer environment into a patent-eligible invention.” (*Id.* at 17; *see also id.* at 19) But even compared with the type of analysis Defendants provided with regard to independent claims 13, 24 and 35, Defendants give these remaining claims very short shrift. (*Id.*) They do not address these claims on a claim-by-claim basis, leaving the Court often to have to apply broad arguments to multiple claims at the same time, with limited record support for those arguments. (*Id.*; *see also id.* at 4-5) The Court is not prepared to take the significant step of finding such claims ineligible when they are addressed in such a cursory manner by the movant in the first instance. The Court takes this protective view as to all of the dependent claims, save one.

That one unique dependent claim is claim 12, which has no analogous claim among the remaining dependent claims. Claim 12 simply adds the utilization of what is not disputed to be anything other than generic technology (i.e., “a processor, a hardware circuit, or an integrated circuit”), in order to perform the “determining a requested initial cloud environment” step of the method in claim 1. (’974 patent, col. 20:5-7) Such an addition is clearly insufficient to provide an inventive concept. *Alice*, 134 S. Ct. at 2360.¹⁸

¹⁸ As to claim 12, with respect to the second *Cronos* factor, Plaintiff has not suggested any possible construction that would alter the Court’s analysis. And as for the third *Cronos* factor, Plaintiff has not identified any issue of fact that would render a decision on patent eligibility premature at this stage.

Consequently, the Court can conclude that claim 1 adequately represents claim 12, which is similarly directed to patent-ineligible subject matter. At this point, the Court does not find it sufficiently clear from the record that the remaining dependent claims are directed to the abstract idea of setting up and managing a cloud computing environment.

IV. CONCLUSION

For the foregoing reasons, the Court concludes that claims 1, 12, 13, 24, and 35 of the '974 patent are not eligible for patent protection under 35 U.S.C. § 101. It therefore recommends that Defendants' Motions be GRANTED as to those claims. The Court recommends that Defendants' Motions be DENIED as to the remaining claims of the '974 patent, without prejudice to their ability to later renew the Motions as motions for summary judgment if warranted.

This Report and Recommendation is filed pursuant to 28 U.S.C. § 636(b)(1)(B), Fed. R. Civ. P. 72(b)(1), and D. Del. LR 72.1. The parties may serve and file specific written objections within fourteen (14) days after being served with a copy of this Report and Recommendation. Fed. R. Civ. P. 72(b). The failure of a party to object to legal conclusions may result in the loss of the right to de novo review in the district court. *See Henderson v. Carlson*, 812 F.2d 874, 878-79 (3d Cir. 1987); *Sincavage v. Barnhart*, 171 F. App'x 924, 925 n.1 (3d Cir. 2006).

The parties are directed to the Court's Standing Order for Objections Filed Under Fed. R. Civ. P. 72, dated October 9, 2013, a copy of which is available on the District Court's website, located at <http://www.ded.uscourts.gov>.

Dated: February 5, 2016



Christopher J. Burke
UNITED STATES MAGISTRATE JUDGE