IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

CITRIX SYSTEMS, INC.,

Plaintiff,

v.

C.A. No. 17-1843-LPS

AVI NETWORKS, INC.,

Defendant.

Douglas E. McCann and Robert M. Oakes, FISH & RICHARDSON P.C., Wilmington, DE

Ruffin B. Cordell and Indranil Mukerji, FISH & RICHARDSON P.C., Washington, DC

Adam J. Kessel, FISH & RICHARDSON P.C., Boston, MA

Elizabeth Brenckman, FISH & RICHARDSON P.C., New York, NY

John-Paul Fryckman, FISH & RICHARDSON P.C., San Diego, CA

Attorneys for Plaintiff

David E. Moore, Bindu A. Palapura, and Stephanie E. O'Byrne, POTTER ANDERSON & CORROON LLP, Wilmington, DE

Josh Krevitt and Brian A. Rosenthal, GIBSON DUNN & CRUTCHER LLP, New York, NY

Y. Ernest Hsin, GIBSON DUNN & CRUTCHER LLP, San Francisco, CA

Brian K. Andrea, GIBSON DUNN & CRUTCHER LLP, Washington, DC

Attorneys for Defendant

MEMORANDUM OPINION

February 13, 2019 Wilmington, Delaware

STARK, U.S District Judge:

Plaintiff Citrix Systems, Inc. ("Citrix") filed suit against Defendant Avi Networks, Inc. ("Avi") on December 21, 2017. (D.I. 1) Citrix alleges infringement of U.S. Patent Nos. 9,148,493 ("the '493 patent"), 8,631,120 ("the '120 patent"), 8,230,055 ("the '055 patent"), and 7,720,954 ("the '954 patent"). (D.I. 21) Citrix also asserts claims for false advertising and unfair competition under the Lanham Act, the Delaware Deceptive Trade Practices Act, and common law. (*Id.*) On June 6, 2018, Avi moved to partially dismiss the First Amended Complaint ("FAC") for failure to state a claim, pursuant to Federal Rule of Civil Procedure 12(b)(6), contending that the asserted claims of the '055 and '954 patents are not directed to patent-eligible subject matter under 35 U.S.C. § 101. (D.I. 24) On October 26, 2018, the Court held a hearing regarding this motion and Avi's motion to transfer venue.¹ (*See* D.I. 63 ("Tr.")) On November 20, 2018 and February 6, 2019, Citrix filed notices of subsequent authority.² (D.I. 67, 75)

For the reasons stated below, the Court will grant Avi's motion to dismiss.

¹ At the same hearing, the Court heard argument on and denied Avi's motion to transfer venue. (D.I. 62) Citrix noted, during the hearing, that Avi's motions do not promote the efficient and expedient resolution of this case. (*See* Tr. 44-45) While this may well be true, it likewise true that Avi had the right to file its motions and require Citrix – and the Court – to deal with them.

² The Court has reviewed Citrix's supplemental authorities and concludes they do not change the proper resolution of the motion. This case materially different from *Ancora Techs., Inc. v. HTC Am., Inc.*, 908 F.3d 1343 (Fed. Cir. 2018), as discussed below. The Court acknowledges the similarity of the challenged claims to Example 40 of the United States Patent and Trademark Office's 2019 Revised Subject Matter Eligibility Guidance. (*See* D.I. 75 Ex. 2) ("PTO Guidance") The PTO Guidance, however, is not binding on the Court. More importantly, the Court concludes that, under binding Supreme Court and Federal Circuit precedent, the claims at issue here are directed to nonpatentable subject matter.

I. BACKGROUND

The asserted claims of the '055 and '954 patents allow one to identify whether a network service is available by determining whether the service's response time exceeds the service's average response time by a predefined amount.³ If the response time is greater than the average response time plus the predefined amount, the service is deemed unavailable. (*See, e.g.*, '055 patent, 26:34-61) According to the patent, this "dynamic" approach provides more accurate identification of service availability than the prior art, which determines availability using a static, pre-defined response time, because the dynamic approach takes into account variations due to increased load or type of request. ('055 patent, 1:17-47)

The '055 patent is entitled "Method and Appliance for Using a Dynamic Response Time

To Determine Responsiveness of Network Services." Claim 1 of the '055 patent recites:

A method for determining responsiveness of a service via a particular protocol, the method comprising:

(a) determining, by a device intermediary to a plurality of clients and a plurality of services, response times from each of a plurality of services to respond to requests via a first type of protocol of a plurality of protocols;

(b) calculating, by the device, an average response time for the first type of protocol from each of the response times of the plurality of services;

(c) establishing, by the device, a predetermined threshold for which a response time of a service for the first type of protocol may deviate from the average response time; and

(d) identifying, by the device, a service as available responsive to determining that a deviation of the response time of the service from the average response falls within the predetermined threshold.

³ The FAC asserts claims 1-3, 6, 11-13, and 16 of the '055 patent, and claims 1-5 and 7-8 of the '954 patent.

The '954 patent is the parent of the '055 patent and shares with it a title and specification.

Claim 1 of the '954 recites:

A method for using a dynamic response time to determine responsiveness of one or more network services on a server, the method comprising the steps of:

(a) determining, by a monitor, a response time for each of one or more network services responding to requests;

(b) establishing, by the monitor, an average response time based on the determined response time for each of the one or more network services;

(c) associating, by the monitor, with the established average response time a predetermined threshold for which the response time of the one or more network services may deviate from the average response time and maintain an indication of responsiveness;

(d) monitoring, by the monitor, the response time of the one or more network services to one or more requests;

(e) determining, by the monitor, that the response time of the one or more network services deviates from the average response time by the predetermined threshold; and

(f) indicating, by the monitor, that one or more network services are unavailable.⁴

II. LEGAL STANDARDS

A. Rule 12(b)(6) Motion to Dismiss

Evaluating a motion to dismiss under Federal Rule of Civil Procedure 12(b)(6) requires

the Court to accept as true all material allegations of the complaint. See Spruill v. Gillis, 372

F.3d 218, 223 (3d Cir. 2004). "The issue is not whether a plaintiff will ultimately prevail but

whether the claimant is entitled to offer evidence to support the claims." In re Burlington Coat

⁴ No argument has been made that claim construction is required here before the Court can resolve the parties' dispute regarding § 101. (*See* Tr. at 59-60)

Factory Sec. Litig., 114 F.3d 1410, 1420 (3d Cir. 1997) (internal quotation marks omitted). Thus, the Court may grant such a motion to dismiss only if, after "accepting all well-pleaded allegations in the complaint as true, and viewing them in the light most favorable to plaintiff, plaintiff is not entitled to relief." *Maio v. Aetna, Inc.*, 221 F.3d 472, 481-82 (3d Cir. 2000) (internal quotation marks omitted).

A well-pleaded complaint must contain more than mere labels and conclusions. *See Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009); *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007). A plaintiff must plead facts sufficient to show that a claim has substantive plausibility. *See Johnson v. City of Shelby*, 135 S. Ct. 346, 347 (2014). A complaint may not be dismissed, however, for imperfect statements of the legal theory supporting the claim asserted. *See id.* at 346.

"To survive a motion to dismiss, a civil plaintiff must allege facts that 'raise a right to relief above the speculative level on the assumption that the allegations in the complaint are true (even if doubtful in fact)." *Victaulic Co. v. Tieman*, 499 F.3d 227, 234 (3d Cir. 2007) (quoting *Twombly*, 550 U.S. at 555). A claim is facially plausible "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. At bottom, "[t]he complaint must state enough facts to raise a reasonable expectation that discovery will reveal evidence of [each] necessary element" of a plaintiff's claim. *Wilkerson v. New Media Tech. Charter Sch. Inc.*, 522 F.3d 315, 321 (3d Cir. 2008) (internal quotation marks omitted).

The Court is not obligated to accept as true "bald assertions," *Morse v. Lower Merion Sch. Dist.*, 132 F.3d 902, 906 (3d Cir. 1997) (internal quotation marks omitted), "unsupported conclusions and unwarranted inferences," *Schuylkill Energy Res., Inc. v. Pa. Power & Light Co.*,

113 F.3d 405, 417 (3d Cir. 1997), or allegations that are "self-evidently false," *Nami v. Fauver*,82 F.3d 63, 69 (3d Cir. 1996).

B. Patentable Subject Matter

Under 35 U.S.C. § 101, "[w]hoever 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." There are three exceptions to § 101's broad patent-eligibility principles: "laws of nature, physical phenomena, and abstract ideas." *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980). "Whether a claim recites patent eligible subject matter is a question of law which may contain disputes over underlying facts." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

In *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289 (2012), the Supreme Court set out a two-step "framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2355 (2014). First, courts must determine if the claims at issue are directed to a patent-ineligible concept ("step one"). *See id.* If so, the next step is to look 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" ("step two"). *Id.* The two steps are "plainly related" and "involve overlapping scrutiny of the content of the claims." *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016).

At both steps 1 and 2, it is often useful for the Court to compare the claims at issue with claims that have been considered in the now considerably large body of decisions applying § 101. *See Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016).

At step one, "the claims are considered in their entirety to ascertain whether their character *as a whole* is directed to excluded subject matter." *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015) (emphasis added); *see also Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) ("*Affinity Labs I*") (stating first step "calls upon us to look at the 'focus of the claimed advance over the prior art' to determine if the claim's 'character as a whole' is directed to excluded subject matter").

In conducting the step one analysis, courts should not "oversimplif[y]" key inventive concepts or "downplay" an invention's benefits. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337-38 (Fed. Cir. 2016); *see also McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016) ("[C]ourts 'must be careful to avoid oversimplifying the claims' by looking at them generally and failing to account for the specific requirements of the claims.") (quoting *In re TLI Commc 'ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016)).

If the claims are directed to a patent eligible concept at step one, the Court need not proceed to step two. *Vanda Pharm. Inc. v. West-Ward Pharm. Int'l Ltd.*, 887 F.3d 1117, 1134 (Fed. Cir. 2018).

At step two, courts must look to both the claim "as a whole" and to individual claim elements to determine whether "the claims contain 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." *McRO*, 837 F.3d at 1312 (internal alterations and quotation marks omitted). The "standard" step two inquiry includes consideration of whether claim elements "simply recite 'well-understood, routine, conventional activit[ies]." *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016) (quoting *Alice*, 134 S. Ct. at 2359). "Simply appending conventional steps, specified at a high level of generality, [is] not *enough* to supply an inventive concept." *Alice*, 134 S. Ct. at 2357 (internal quotation marks omitted; emphasis in original). Moreover, "a claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept." *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018). Instead, the relevant question is "whether the claim limitations *other than the invention's use of the ineligible concept* to which it was directed were well-understood, routine and conventional." *Id.* (emphasis added).

"Whether a particular technology is well-understood, routine, and conventional goes beyond what was simply known in the prior art. The mere fact that something is disclosed in a piece of prior art, for example, does not mean it was well-understood, routine, and conventional." *Berkheimer*, 881 F.3d at 1369; *see also Exergen Corp. v. Kaz USA, Inc.*, 725 F. App'x 959, 965 (Fed. Cir. 2018) ("Something is not well-understood, routine, and conventional merely because it is disclosed in a prior art reference. There are many obscure references that nonetheless qualify as prior art."). Moreover, "[t]he inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art." *Bascom*, 827 F.3d at 1350. For instance, in *Bascom*, the Federal Circuit held that "the limitations of the claims, taken individually, recite generic computer, network and Internet components, none of which is inventive by itself," but nevertheless determined that an *ordered combination* of these limitations was patent-eligible under step two. *Id.* at 1349.

As part of the step two "inventive concept" inquiry, the Federal Circuit has looked to the claims as well as the specification. *See Affinity Labs of Texas, LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1271 (Fed. Cir. 2016) ("*Affinity Labs II*") ("[N]either the claim nor the specification reveals any concrete way of employing a customized user interface."). Still, it is not enough just

to disclose the improvement in the specification; instead, the Court's task is to "analyze the asserted claims and determine whether they *capture these improvements*." *Berkheimer*, 881 F.3d at 1369 (emphasis added). In other words, "[t]o save a patent at step two, an inventive concept must be *evident in the claims*." *RecogniCorp*, *LLC v. Nintendo Co., Ltd.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (emphasis added); *see also Alice*, 134 S. Ct. at 2357 ("[W]e must examine the *elements of the claim* to determine whether it contains an 'inventive concept."") (emphasis added); *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1149 (Fed. Cir. 2016) ("The § 101 inquiry must focus on the language of the Asserted Claims themselves.").

"The question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact. Any fact, such as this one, that is pertinent to the invalidity conclusion must be proven by clear and convincing evidence." *Berkheimer*, 881 F.3d at 1368; *see also Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018) ("While the ultimate determination of eligibility under § 101 is a question of law, like many legal questions, there can be subsidiary fact questions which must be resolved en route to the ultimate legal determination."); *Automated Tracking Sols., LLC v. Coca-Cola Co.*, 723 F. App'x 989, 995 (Fed. Cir. 2018) ("We have held that 'whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact."") (quoting *Berkheimer*, 881 F.3d at 1368).

Finally, as a procedural matter, the Federal Circuit has observed that § 101 disputes may be amenable to resolution on motions for judgment on the pleadings, motions to dismiss, or summary judgment. *Berkheimer*, 881 F.3d at 1368 ("Patent eligibility has in many cases been *resolved on motions to dismiss or summary judgment. Nothing in this decision should be*

viewed as casting doubt on the propriety of those cases.") (emphasis added). For instance, the Federal Circuit has noted that even "in ruling on a 12(b)(6) motion, a court need not accept as true allegations that contradict matters properly subject to judicial notice or by exhibit, such as the claims and the patent specification." *Berkheimer*, 890 F.3d at 1372 (internal alterations and quotation marks omitted). It follows that "[i]n a situation where the specification admits the additional claim elements are well-understood, routine, and conventional, it will be difficult, if not impossible, for a patentee to show a genuine dispute." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 890 F.3d 1354, 1356 (Fed. Cir. 2018).

Applying these principles, the Federal Circuit has repeatedly affirmed early resolution of patent eligibility challenges. *See, e.g., buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1351-52 (Fed. Cir. 2014) (affirming grant of Rule 12(c) motion for judgment on pleadings for lack of patentable subject matter); *Intellectual Ventures I LLC v. Symantec Corp.*, 725 F. App'x 976, 978 (Fed. Cir. 2018) (affirming grant of summary judgment of patent ineligibility and stating *Berkheimer* "does not compel a different conclusion"); *Maxon, LLC v. Funai Corp., Inc.*, 726 F. App'x 797, 798 (Fed. Cir. 2018) (affirming grant of motion to dismiss for lack of patentable subject matter); *Voter Verified, Inc. v. Election Sys. & Software LLC*, 887 F.3d 1376, 1379 (Fed. Cir. 2018), *cert. denied*, No. 18-549, 2019 WL 113159 (Jan. 7, 2019) (affirming grant of motion to dismiss for lack of patentable subject matter); *Glasswall Sols. Ltd. v. Clearswift Ltd.*, C.A. No. 2018-1407, 2018 WL 6720014, at *1 (Fed. Cir. Dec. 20, 2018) (affirming grant of motion to dismiss for lack of patentable subject matter); *Athena Diagnostics, Inc. v. Mayo Collaborative Servs., LLC*, No. 2017-2508, 2019 WL 453489, at *1 (Fed. Cir. Feb. 6, 2019) (affirming grant of motion to dismiss for lack of patentable subject matter); *SAP America, Inc. v. InvestPic, LLC*,

898 F.3d 1161, 1166 (Fed. Cir. 2018) (collecting cases affirming district court grants of Rule 12(b)(6) or (c) motions for lack of patentable subject matter).

III. DISCUSSION

Avi contends that the asserted claims of the '055 patent and the '954 patent are invalid under 35 U.S.C. § 101. (D.I. 25)⁵ At step 1, Avi argues that the challenged claims are directed to the abstract idea of "determining service availability based on a deviation from average response time." (*Id.* at 8-10) At step 2, Avi argues that the claims lack an inventive concept because the only alleged innovation here is the use of a dynamic, as opposed to static, response time. (D.I. 38 at 5-9) To Avi, because the use of a dynamic response time is an abstract idea, it cannot supply an inventive concept. (*Id.*)

For the reasons described below, the Court agrees and will grant Avi's motion to dismiss.

A. Step One

At step one of the *Alice/Mayo* test, the question is whether the asserted claims are directed to a patent-ineligible concept. "[A]ll inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Mayo*, 132 S. Ct. at 1293. Thus, "an invention is not rendered ineligible for patent simply because it involves" a patent-ineligible concept. *Alice*, 134 S. Ct. at 2354. "At step one, therefore, it is not enough to merely identify a patent-ineligible concept underlying the claim; we must determine whether that patent-ineligible concept is what the claim is 'directed to.'" *Id*.

The claims here are directed to the abstract idea of using a dynamic response time to determine availability. According to the patents, the claimed "dynamic" approach provides more

⁵ The Court will follow the parties' lead and consider claim 1 of the '055 and '954 patents together.

accurate identification of service availability than the prior art, which determines availability using a static response time defined by an administrator, because the dynamic approach takes into account variations due to increased load or type of request. ('055 patent, 1:17-47) The FAC also frames the invention by contrast to the prior art static approach:

[T]he conventional method for determining the responsiveness of servers to network requests was for a static response time to be defined by a system administrator.... Citrix's inventors developed the patented technology of the '055 and '954 patents to improve upon these conventional systems by using a *dynamic rather than static response time* to determine responsiveness of network services.

(D.I. 21 at ¶¶ 36-37) (emphasis added) Thus, at bottom, the claimed innovation is the use of one formula (determining availability using an average response time) instead of another, prior art, formula (determining availability using a predetermined response time) with the same arrangement of computer components. Because the focus of the claims is the use of an ostensibly improved formula, the claims are directed to an abstract idea. *See SAP America, Inc. v. Investpic, LLC*, 898 F.3d at 1167-68 (holding claims directed to "statistical analysis" to be patent-ineligible); *In re Grams*, 888 F.2d 835, 836-37 n.1 (Fed. Cir. 1989) (holding method of diagnosing medical condition by comparing measured values to "reference ranges of values" to "detect a non-significant deviation from a normal condition" is patent ineligible, adding "[i]t is of no moment that the algorithm is not expressed in terms of a mathematical formula").

Citrix's argument that the claims pass *Alice* step one because they improve computer functionality is unpersuasive. A claim is patent-eligible under step one when the claims are "directed to an improvement to computer technology" rather than "directed to an abstract idea." *Thales Visionix Inc. v. United* States, 850 F.3d 1343, 1347 (Fed. Cir. 2017). Citrix contends that the claims "are necessarily directed to an improved accuracy of service availability identification in a computer network environment." (*Id.*) Citrix relies on the patents and the FAC, both of which describe technical advantages that result from the use of a dynamic response time instead of a static response time in the technological context of a computer network environment.⁶ (D.I. 33 at 13-14, 17-20) These technical advantages include more accurate determination of availability (especially where a system provides several different kinds of network services) and improved load balancing between services. ('055 patent, 1:24-2:43; '954 patent, 1:15-38; D.I. 21 ¶¶ 37-43; D.I. 34 ¶¶ 15-19, 30-34)

Even taking these contentions as true, the factual conclusion that practicing a claim improves computer functionality does not end the *Alice* step one inquiry. Rather, the Court must also consider the source of the improved computer functionality. A claim is not "directed to" an improvement in computer functionality if the technical benefits flow solely from performing an abstract idea in conjunction with well-understood structure. *See BSG Tech*, 899 F.3d at 1288. Here, Citrix does not contend that any of the technological elements recited by the claims, such as the "monitor" or "device intermediary," were anything but well-understood. *(See D.I. 33 at 10-12)* Instead, the purported technical benefits flow directly from the idea of using a dynamic – as opposed to a static – response time to determine availability. In virtually every context, technical and non-technical, an average of prior response times will be a better gauge of availability than a static threshold. *(See, e.g., D.I. 25 at 11-12)* (providing non-technical examples of using dynamic response time to determine availability) Contrary to Citrix's contention, then, the use of dynamic response times is not "necessarily rooted in computer

⁶ Citrix also cites to a declaration by Dr. Mark Jones. (*See* D.I. 34) The Court is not considering this declaration in resolving the motion to dismiss because it was not attached to, integral to, or referenced in the FAC. The Court considers this declaration only to the extent that it bears on whether a further amendment of the FAC would be futile.

networks." (D.I. 33 at 13-14) The technical context recited by the claims – service availability in a computer network – does not change the nature of this idea, and every technical advantage identified by Citrix ultimately stems from the same *generalized* improved determination of availability that the use of a dynamic response time would provide in any other context. For this reason, the claims here are distinguishable from those in *Enfish*, *Visual Memory*, *Ancora*, and the other cases to which Citrix draws analogies. *See Enfish*, 822 F.3d at 1327 (finding claims patenteligible when directed to "*specific* improvement to computer functionality") (emphasis added); *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253 (Fed. Cir. 2017) (same); *Ancora*, 2018 WL 6005021 (Fed. Cir. Nov. 16, 2018) (same). Accordingly, the claims here are not "directed to" improvements in computer technology.

The parties holly contest whether *BSG Tech* is apposite to this case. (*See generally* D.I. 38, 46, 55) In *BSG Tech*, 899 F.3d at 1283-85, the Federal Circuit evaluated the patenteligibility of claims directed to a "self-evolving generic index" that assisted users entering data into a database by providing the users with information from prior data entries. The Court found that the claims were directed to the abstract idea of "considering historical usage information while inputting data," *id.* at 1286, and that the claims lacked an inventive concept because the only allegedly unconventional feature of the claims was the abstract idea, *id.* at 1291. Avi contends that *BSG Tech* requires rejection of Citrix's argument that the claims are "directed to" a technical improvement in computer networks. (D.I. 38 at 1, 3-5) Citrix distinguishes the case, contending that its own claims solve technical problems with technical solutions, while arguing that the claims in *BSG Tech* were instead directed to "the very human activity of organizing information about various items based on their attributes." (D.I. 46 at 1-2) The Court agrees with Avi. Fundamentally, both this case and *BSG Tech* involve patents that apply an abstract

idea in a technological context to obtain a purported technical benefit. In *BSG Tech*, the technological context was in "wide access databases," and the technical improvement was to "allow[] users to quickly and efficiently access hundreds of thousands or even millions of records, and still find only those few records that are relevant." 899 F.3d at 1286, 1288. Here, the technological context is computer networks, and the purported benefits arise from more accurate determination of whether a network service is available. Accordingly, here, as in *BSG Tech*, the claims are not directed to a technical improvement as the purported technical benefit flows solely from an abstract idea. That in *BSG Tech* the abstract idea was a method of organizing human activity, and here is a mathematical formula, is of no consequence.

As claim 1 of each of the asserted patents are directed to an abstract idea, the Court must proceed to step two of the analysis.

B. Step Two

A claim directed to an abstract idea is nevertheless patent eligible if it captures an "inventive concept" beyond what was "well-understood, routine, and conventional" at the time of the invention. *See Alice*, 134 S.Ct. at 2359. This inventive concept ensures that "the patent in practice amounts to significantly more than a patent upon the [abstract idea] itself." *Id.* at 2355 (internal quotation marks omitted). It follows that "a claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept." *BSG Tech*, 899 F.3d at 1290.

Even taking as true Citrix's assertions regarding the novelty and benefits of using dynamic response times, the Court cannot find in the asserted patents an inventive concept. The only allegedly unconventional feature of the claims is the use of dynamic (as opposed to static) response time to determine availability. (D.I. 33 at 12-14, 17-20) But the Court has already

determined this feature to be an abstract idea, and so this idea, no matter how beneficial when applied in a technical context, cannot provide an inventive concept. *See BSG Tech*, 899 F.3d at 1290; *see also generally Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013) (stating that "[g]roundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry").

Citrix contends that the claims are inventive, in any event, because they solve "computercentric problems with computer-centric solutions," and recite technical elements. (D.I. 33 at 12-14) But Citrix fails to provide any concrete or persuasive explanation of how determination of availability is "a problem specifically arising in the realm of" computer networks, or how the combination of technological elements recited in the claims is unconventional. Cf. DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245 (Fed. Cir. 2014) (holding claims on maintaining website look-and-feel patent-eligible because claims were "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks"); Thales v. United States, 850 F.3d 1343, 1349 (Fed. Cir. 2017) (holding claims on inertial sensors patent-eligible, despite claims involving use of laws of physics, because configuration of sensors was "unconventional"); Amdocs, 841 F.3d 1288 (Fed. Cir. 2016) (holding claims on collecting and processing of network usage information included inventive concept because "collection, filtering, aggregating, and completing steps all depend upon the invention's unique distributed architecture") (emphasis added). On the contrary, the patents repeatedly characterize the recited technical elements as being conventional both individually and in combination:

The network 104 and/or 104' and network topology may be of *any* such network or network topology as known to those ordinarily skilled in the art capable of supporting the operations described herein...

A client 102 may . . . provide an application, which can *be any type and/or form of software* . . . capable of executing on client 102. . . .

The client 102, server 106, and appliance 200 may be deployed as and/or executed on *any type and form of computing device*, such as a computer, network device or appliance capable of communicating on *any type and form of network* and performing the operations described herein.

('954 patent, 4:53-56, 8:6-12, 8:53-57) (emphasis added) Therefore, no factual disputes preclude granting Avi's motion to dismiss.

For these reasons, the Court finds that claim 1 of the '055 patent and claim 1 of the '954 patent are directed to patent-ineligible subject matter under Section 101.

C. Dependent Claims

Citrix argues that several of the dependent claims add features that render at least those claims patent eligible. (D.I. 33 at 14-16)⁷ However, for the following reasons, the Court disagrees.

Several of the claims⁸ recite using a "probe" to determine response times. Some of these claims also recite specific protocols, such as Transport Control Protocol (TCP), Secure Sockets Layer (SSL), and Hypertext Transfer Protocol (HTTP). According to Citrix, "[t]hese features further emphasize the point that the claims improve the functioning of a computer and are particular to the computer network environment." However, these claims merely recite conventional combinations of hardware and data transmission protocols and, so, do not make

⁷ Citrix does not agree that claim 1 of each patent is representative of all claims at issue in the motion. (*See* Tr. at 60)

⁸ Claims 2, 3, 12, and 13 of the '055 patent and claims 2, 3, 7, and 8 of the '954 patent.

eligible otherwise ineligible claims. *See* '055 patent, 8:14-16, 12:16-20, 21:49-57; *Alice*, 134 S.Ct. at 2359.

Citrix also points to claims 5 and 6 of the '055 patent, which recite updating, by a device, "the average response time at predetermined intervals." Citrix contrasts these limitations with the prior art approach of using response times defined by a system administrator. (D.I. 33 at 16) However, this is simply performing an otherwise well-understood step with a conventional computer, a combination which does not confer patent eligibility. *See Alice*, 134 S.Ct. at 2358.

IV. CONCLUSION

For the reasons stated above, the Court will grant Avi's motion to dismiss. The Court will grant the motion with prejudice because, based on the Court's analysis, any further amendment would be futile. The Court reaches this conclusion having considered Citrix's FAC (D.I. 21) (which, notably, was filed *after* Citrix had reviewed Avi's motion to dismiss the original complaint based on § 101) and its expert declaration (D.I. 34).

An appropriate order follows.