IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

SYNKLOUD TECHNOLOGIES, LLC,	
Plaintiff,	
v.	Civil Action No. 19-1360-RGA
HP INC.,	
Defendant.	

MEMORANDUM OPINION

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September 28, 2020

/s/ Richard G. Andrews

ANDREWS, UNITED STATES DISTRICT JUDGE:

Before me is Defendant's motion to dismiss for failure to state a claim. (D.I. 17). I have considered the parties' briefing. (D.I. 18, 21, 24). Because I find that some of the asserted claims of the patents at issue do not satisfy the test for eligibility under § 101 of the Patent Act, I will grant Defendant's motion in part and deny it in part.

I. BACKGROUND

Plaintiff filed this patent infringement lawsuit asserting infringement of "at least claim 1" of U.S. Patent Nos. 9,098,526 ("the '526 patent") and 10,015,254 ("the '254 patent") on July 22, 2019. (D.I. 1). Plaintiffs submitted a First Amended Complaint on November 12, 2019 further asserting claims 1 of U.S. Patent Nos. 8,694,590 ("the '590 patent") and 7,879,225 ("the '225 patent"). (D.I. 15).

Defendant alleges that the Asserted Patents are invalid for claiming ineligible subject matter under 35 U.S.C. § 101. (D.I. 18 at 1). Specifically, Defendant alleges that the '526 and '254 patents are directed at the abstract idea of storing and retrieving data from a remote location, that the '590 patent is directed to receiving, reformatting and delivering a message and that the '225 patent is directed to communicating instructions to a remote recipient in the same manner as if to a local recipient. (*Id.*). Defendant also contends that the claims of the Asserted Patents contain no inventive concept, merely implementing abstract ideas using common computer components and functionality that were routine or conventional. (*Id.* at 2).

II. LEGAL STANDARDS

A. Rule 12(b)(6)

¹ The four patents are exhibits 1, 3, 6, and 8 at D.I. 15-1.

Defendant moves to dismiss the pending action pursuant to Rule 12(b)(6), which permits a party to seek dismissal of a complaint for failure to state a claim upon which relief can be granted. Fed. R. Civ. P. 12(b)(6). According to Defendant, Plaintiff's complaint fails to state a claim because the asserted claims of the patents-in-suit are ineligible for patent protection under 35 U.S.C. § 101. Patent eligibility under 35 U.S.C. § 101 is a threshold test. *Bilski v. Kappos*, 561 U.S. 593, 602 (2010). Therefore, "patent eligibility can be determined at the Rule 12(b)(6) stage ... when there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018).

When considering a Rule 12(b)(6) motion to dismiss, the court must accept as true all factual allegations in the complaint and view them in the light most favorable to the plaintiff. *Umland v. Planco Fin. Servs.*, 542 F.3d 59, 64 (3d Cir. 2008). Dismissal under Rule 12(b)(6) is only appropriate if the complaint does not 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) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007)); *see also Fowler v. UPMC Shadyside*, 578 F.3d 203, 210 (3d Cir. 2009). However, "a court need not accept as true allegations that contradict matters properly subject to judicial notice or by exhibit, such as the claims and patent specification." *Secured Mail Solns. LLC v. Universal Wilde, Inc.*, 873 F.3d 905, 913 (Fed. Cir. 2017) (cleaned up).

B. Patent-Eligible Subject Matter

Section 101 of the Patent Act defines patent-eligible subject matter. It provides: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor,

subject to the conditions and requirements of this title." 35 U.S.C. § 101. The Supreme Court recognizes three categories of subject matter that are not eligible for patents—laws of nature, natural phenomena, and abstract ideas. *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014). The purpose of these exceptions is to protect the "basic tools of scientific and technological work." *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 86 (2012). "[A] process is not unpatentable simply because it contains a law of nature or a mathematical algorithm," as "an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection." *Id.* at 71 (internal quotation marks and emphasis omitted). In order "to transform an unpatentable law of nature into a patent-eligible application of such a law, one must do more than simply state the law of nature while adding the words 'apply it." *Id.* at 72 (emphasis omitted).

In *Alice*, the Supreme Court reaffirmed the framework laid out in *Mayo* "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." 573 U.S. at 217. First, the court must determine whether the claims are drawn to a patent-ineligible concept. *Id.* If the answer is yes, the court must look to "the elements of the claim both individually and as an 'ordered combination'" to see if there is an "inventive concept'—*i.e.*, an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Id.* (alteration in original). "A claim that recites an abstract idea must include 'additional features' to ensure that the [claim] is more than a drafting effort designed to monopolize the [abstract idea]." *Id.* at 221. Further, "the prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [the idea] to a particular technological environment." *Id.* at 222 (quoting *Bilski*, 561 U.S. at 610-11).

Thus, "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Alice*, 573 U.S. at 222.

Patentability under 35 U.S.C. § 101 is a threshold legal issue. *Bilski*, 561 U.S. at 602. Accordingly, the § 101 inquiry is properly raised at the pleadings stage if it is apparent from the face of the patent that the asserted claims are not directed to eligible subject matter. *See Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1360 (Fed. Cir. 2017), *cert. denied*, 138 S. Ct. 2621 (2018). In these situations, claim construction is not necessarily required to conduct a § 101 analysis. *Genetic Techs. Ltd. v. Merial LLC*, 818 F.3d 1369, 1374 (Fed. Cir. 2016) ("[C]laim construction is not an inviolable prerequisite to a validity determination under § 101." (brackets in original, internal citations and quotations omitted)). The Federal Circuit has held that the district court is not required to address individual claims not identified by the non-moving party, so long as the court identifies a representative claim and "all the claims are substantially similar and linked to the same abstract idea." *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, 776 F.3d 1343, 1348 (Fed. Cir. 2014) (internal quotation marks omitted).

1. Abstract Idea

"First, we determine whether the claims at issue are directed to [an abstract idea]." *Alice*, 573 U.S. at 217. "The 'abstract ideas' category embodies 'the longstanding rule that an idea of itself is not patentable." *Id.* (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). "The Supreme Court has not established a definitive rule to determine what constitutes an 'abstract idea' sufficient to satisfy the first step of the *Mayo/Alice* inquiry." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016). The Supreme Court has recognized, however, that "fundamental economic practice[s]," *Bilski*, 561 U.S. at 611, "method[s] of organizing human

activity," *Alice*, 573 U.S. at 220, and mathematical algorithms, *Benson*, 409 U.S. at 64, are abstract ideas. In navigating the parameters of such categories, courts have generally sought to "compare claims at issue to those claims already found to be directed to an abstract idea in previous cases." *Enfish*, 822 F.3d at 1334. "[S]ome improvements in computer-related technology when appropriately claimed are undoubtedly not abstract." *Id.* at 1335. "[I]n determining whether the claims are directed to an abstract idea, we must be careful to avoid oversimplifying the claims because '[a]t some level, all inventions... embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (alterations in original) (quoting *Alice*, 573 U.S. at 217).

The specification is helpful in determining what a claim is "directed to." *See In re TLI*, 823 F.3d at 611-12; *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1376 (Fed. Cir. 2015). But while the specification may help illuminate the true focus of a claim, when analyzing patent eligibility, reliance on the specification must always yield to the claim language in identifying that focus. *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 766-69 (Fed. Cir. 2019). This is because "the concern that drives" the judicial exceptions to patentability is "one of preemption," and the claim language defines the breadth of each claim. *Alice*, 573 U.S. at 216; *see Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 336 U.S. 271, 277 (1949) ("[I]t is the claim which measures the grant to the patentee."). Thus, as part of the "directed to" analysis, I also consider whether a claim is truly focused on an abstract idea (or other ineligible matter), whose use the patent law does not authorize anyone to preempt. *See Mayo*, 566 U.S. at 72; *see also Alice*, 573 U.S. at 223 (noting "the preemption concern that undergirds our \$101 jurisprudence"); *Ariosa Diagnostics*, 788 F.3d at 1379 ("The Supreme Court has made clear that the principle of

preemption is the basis for the judicial exceptions to patentability."). "[A] specification full of technical details about a physical invention may nonetheless conclude with claims that claim nothing more than the broad law or abstract idea underlying the claims, thus preempting all use of that law or idea." *ChargePoint*, 920 F.3d at 769.

2. Inventive Concept

At step two, I consider whether the claims contain an "inventive concept sufficient to transform the claimed abstract idea into a patent eligible application." *Alice*, 573 U.S. at 221 (internal quotations omitted). An "inventive concept" exists when a claim "recite[s] a specific, discrete implementation of the abstract idea" where the "particular arrangement of elements is a technical improvement over [the] prior art." *BASCOM Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2015). This focus on specificity is linked with concerns about preemption. *See Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1306 (Fed. Cir. 2016) (finding claims eligible at step two because "they describe a specific, unconventional technological solution, narrowly drawn to withstand preemption concerns, to a technological problem").

To pass step two, the claim "must include additional features" that "must be more than well-understood, routine, conventional activity." *Ultramercial, Inc. v. Hulu, LLC*, 772 F.2d 709, 715 (Fed. Cir. 2014) (internal quotations omitted). "If a claim's only 'inventive concept' is the application of an abstract idea using conventional and well-understood techniques, the claim has not been transformed into a patent-eligible application of an abstract idea." *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1290-91 (Fed. Cir. 2018).

III. DISCUSSION

A. The '526 and '254 Patents

The '526 patent and the '254 patent are titled "System and Method for Wireless Device Access to External Storage." Both patents claim priority to the same application. Asserted Claim 1 of the '526 patent recites:

A wireless device comprising:

at least one cache storage, one wireless interface, and program code configured to cause the wireless device to:

establish a wireless link for the wireless device access to a storage space of predefined capacity assigned exclusively to a user of the wireless device by a storage server, and

couple with the storage server across the wireless link to carry out a requested operation for remote access to the assigned storage space in response to the user from the wireless device performing the operation,

wherein the operation for the remote access to the assigned storage space comprises storing a data object therein or retrieving a data object therefrom, the storing of a data object including to download a file from a remote server across a network into the assigned storage space through utilizing download information for the file stored in said cache storage in response to the user from the wireless device performing the operation for downloading the file from the remote server into the assigned storage space.

('526 patent at 5:61-6:15). Asserted Claim 1 of the '254 patent recites:

A wireless device accessing a remote storage space, the wireless device comprising:

at least one cache storage for caching data received from the Internet, and

one computer-readable storage device comprising program instructions which, when executed by the wireless device, configure the wireless device accessing the remote storage space, wherein the program instructions comprise:

program instructions for the wireless device establishing a communication link for accessing the remote storage space served by a first server;

program instructions for the wireless device displaying the remote storage space upon receiving information of the remote storage space from the first server; and

program instructions for the wireless device coupling with the first server to carry out a requested operation for accessing the remote storage space in response to a user, through the remote storage space displayed on the wireless device, performing the operation,

wherein the operation being carried out for accessing the remote storage space comprises from the wireless device storing data therein or retrieving data therefrom, the storing data comprising to download a file from a second server across a network into the remote storage space through utilizing information for the file cached in the cache storage in the wireless device.

('254 patent at 5:64-6:24).

The '526 patent proposes the idea that "the storage of a server can be used as the external storage for wireless devices." ('526 patent at 2:32-38). Claim 1 of the '526 patent is directed to a wireless device (1) with a wireless link for access to an assigned server storage space, (2) that can remotely store a data object from the storage space, (3) which includes downloading data from a remote server into the storage space using download information from the wireless device's cache. (*See id.* at 5:61-6:15). Claim 2 limits the data object described in Claim 1 to "comprise[] a message or multimedia data of video, digital music, or digital picture." (*Id.* at 6:16-19). Claim 3 makes the user's dedicated device one of a "plurality of storage devices." (*Id.* at 6:20-23). Claim 4 specifies that download information transmitted to the storage server causes data download. (*Id.* at 6:24-31). Claim 5 limits the wireless device to "one of a cell phone or a personal data and management device ('PDA')." (*Id.* at 6:32-34). Claims 6 and 10 recite that data can be saved in folders or "folder structures." (*Id.* at 6:35-39; 6:53-57). Claims 7 and 8 describe that folders and files can be deleted, moved, copied or renamed. (*Id.* at 6:40-49). Claim 9 describes access to the storage space using a web browser. (*Id.* at 6:50-52).²

The '254 patent purports to solve the same problem as the '526 patent, in a like manner. (*See* '254 patent at 1:21-33 ("This invention relates to wireless devices accessing and using external storage spaces provided by one or more servers."); 2:29-33). The '254 patent recites the

² Claims 1 to 10 are device claims. Claims 11-20 are non-transitory computer-readable medium claims that essentially parallel the device claims.

same steps for downloading data from a remote web server site into external storage (*id.* at 5:6-32) and the same steps for retrieving data from the external storage (*id.* at 5:33-43). The '254 patent has a substantially similar specification as the '526 patent and both claim priority to the same 2003 patent application.

Claim 1 of the '254 patent is directed to a wireless device that (1) has a communication link for accessing a first server storage space, (2) can display the remote storage space, (3) couples with the first server to access the remote storage space to either store data or retrieve data and (4) includes downloading data from a remote server into the storage space using download information stored in the wireless device's cache. (*See* '254 patent at 5:64-6:24). The dependent claims do not add significant claim limitations. Claim 2 recites that download information transmitted to the storage server cause the server to download a file. (*Id.* at 6:25-33). Claim 3 defines "download information" as file name and location. (*Id.* at 6:34-37). Claim 4 describes displaying the remote storage space on a web browser. (*Id.* at 6:38-43). Claim 5 makes the wireless device "one of a cell phone, or a personal data assistant." (*Id.* at 6:44-46). Claims 6 and 7 describe the use of folders and that files and folders may be moved, copied, deleted or renamed. (*Id.* at 6:47-51, 6:52-57). Claim 8 describes the types of files that may be stored or retrieved (e.g., messages, videos, music or pictures). (*Id.* at 6:58-62).

Because the asserted claims of the '526 and '254 patents are "substantially similar and linked to the same abstract idea," I will discuss them together. **See Content Extraction & Transmission LLC, 776 F.3d at 1348.

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³ Claims 9-15 are server claims and claims 16-20 are method claims

⁴ "Courts may treat a claim as representative . . . if the patentee does not present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018). Defendant asserts that claim 1 of the '526 and claim 1 of the '254 patent are representative of the remaining claims in

1. Abstract Idea

Defendant argues that the asserted claims of the '526 and '254 patents are directed to the abstract idea of "storing data to, or retrieving data from, a remote location, including transferring data from one remote location to another," merely using computers to automate basic human steps. (D.I. 18 at 14-15). Plaintiff argues that the claims are not abstract because they are directed to solving a problem with computer technology, namely, limited storage space on a wireless device and unlimited access to information on the internet. (D.I. 21 at 8). Plaintiff argues that the patents further include claim elements that improve the wireless device by expanding available storage using an interactive display of the remote storage space. (*Id.* at 15-16).

The Federal Circuit has established that the storage and retrieval of information is an abstract concept. *Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1330 (Fed. Cir. 2017). Storing data is a "generic computer function[]." *In re TLI*, 823 F.3d at 612. "[S]ending and receiving information" over a network are "routine computer functions." *Erie Indem. Co.*, 850 F.3d at 1329. In *Intellectual Ventures I LLC v. Symantec Corp.*, this Court invalidated a claim for copying data to a remote location because the claim was directed to "the abstract idea of backing up data." 234 F. Supp. 3d 601, 607 (D. Del. 2017), *aff'd*, 725 F. App'x 976, 978 (Fed. Cir. 2018); *see also WhitServe LLC v. Dropbox, Inc.*, 2019 WL 3342949, at *4, *8 (D. Del. July 25, 2019) (invalidating claims directed to backing up data records), appeal pending, No. 19-2334 (filed Aug. 29, 2019). I do not see much difference between backing up data at a remote location and increasing storage capacity by storing data at a remote location. Courts have also found that

their respective patents. (D.I. 11 at 4 n.1). Plaintiff disputes the representativeness of the claims. (D.I. 21 at 3). Since only claim 1 of each of the '526 and '254 patents are expressly asserted, I will principally address each claim 1 here, and, for the motion at issue, I merely conclude that they are representative of the dependent claims that depend from them.

such claims are directed to longstanding practices of human organization. *See*, *e.g.*, *WhitServe*, 2019 WL 3342949, at *5 ("It is a well-understood practice of human organization that backup copies [of data] are stored in a location separate and distinct from the original location."); *Symantec Corp.*, 234 F. Supp. 3d at 607 ("It is undisputed that institutions have long backed up data").

Plaintiff asserts that the claimed technology is not directed to an abstract idea because "the claims require synchronized operation of three separate computing devices." (D.I. 21 at 7, 15). These include a remote storage server that allocates storage space to a user, a remote server on the Internet, and a local wireless device. (*Id.* at 15). Plaintiff does not, however, explain why adding a third generic computing device would render the claims non-abstract. Nor does the "synchronous operation" described in the briefing appear supported by the claims. *See ChargePoint*, 920 F.3d at 766-69. Without more, I am not persuaded that the use of three devices represents an improvement to computer technology or otherwise changes the character of the claims such that they are not directed to an abstract idea.

The components and processes recited in the asserted claims of both patents comprise generic and conventional computer components and functions. Both patents describe the "wireless device" as a generic "cellphone or PDA." ('526 patent at 2:29-32; '254 patent at 1:29-33). Both describe "internal storage" of a computing system as comprising "hard disk drives, memory sticks, [and] memory" internally connected to a computing system. ('526 patent at 1:31-33; '254 patent at 1:29-33). Both patents describe "external storage" as consisting of "hard disk drives" and "memory card[s]" ('526 patent at 1:41-45; '254 patent at 1:41-45), and the "webbrowser" as any "suitable software capable [of] communication with web server software [on a] web server through the HTTP protocol" ('526 patent at 3:27-30; '254 patent at 3:26-29).

Reciting tangible components does not make the claims less abstract where the asserted patents "make[] clear that the recited physical components merely provide a generic environment in which to carry out the abstract idea." *In re TLI*, 823 F.3d at 611. Claiming "wireless devices" operating over a communication network also does not make the idea non-abstract. *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1366 (Fed. Cir. 2015) ("An abstract idea does not become non-abstract by limiting the invention to a particular field of use or technological environment, such as the Internet."). The patents describe the use of a "wireless device," "a storage server," "a remote server across a network," and "a storage server." (*See, e.g.*, '590 patent at 5:61, 5:64-67, 6:5-10). The patents therefore use existing computer functionality as a network data storage tool and do not disclose nor claim any improved aspect of the computer or network. *See Symantec Corp.*, 234 F. Supp. 3d at 607.

Plaintiff argues that the patent claims include "elements that allow the user to request operations on the remote storage through [a] display on the wireless device giving an intuitive user interface." (D.I. 21 at 15-16). The Federal Circuit has found patents eligible where "the claims require a specific, structured graphical user interface paired with a prescribed functionality directly related to the graphical user interface's structure that is addressed to and resolves a specifically identified problem in the prior state of the art." *Trading Techs. Int'l, Inc. v. CQG, Inc.*, 675 F. App'x 1001, 1004 (Fed. Cir. 2017). That is not the case here. To pass the test set forth in *Alice*, the patent must describe how to solve the purported problem in a manner that goes beyond asserting the "principle in the abstract." *See ChargePoint*, 920 F.3d at 769; *see also Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1305 (Fed. Cir. 2018) ("[A] result, even an innovative result, is not itself patentable."). The claimed "display" is neither specific nor structured. *See Trading Techs.*, 675 F. App'x at 1004.

The specification does not describe any "intuitiveness" problem with prior art user interfaces or how the recited display resolves any such problem. *See ChargePoint*, 920 F.3d at 766. Plaintiff attempts to construe the "display" terms to "require non-conventional use of display information." (D.I. 21 at 19). The patent, however, does not describe how any intuitive user interface would work. The claimed "display" is neither specific nor structured. The only interface that is described in the specification is a generic "web-browser" that can "access and browse any web-site on the internet, and Intranet." ('254 patent at 3:4-7; *see also id.* at 3:26-29 ("[T]he web-browser . . . can be any suitable software tool, which is capable to [sic] communication with web server software")). While I normally accept whatever claim construction the plaintiff proffers at the Rule 12(b)(6) stage, to the extent that Plaintiff argues that the "display" terms must be construed (D.I. 21 at 19), it is unclear what Plaintiff's proposal is, and, in any event, whatever structure Plaintiff has in mind does not make the claims non-abstract.

Plaintiff also argues that there is a dispute regarding the terms "cache" or "cache storage" that require construction before this Court can rule on Defendant's motion. According to Plaintiff, a person of ordinary skill in the art would understand that the term "cache" is a high-speed access area in hardware or software of a computing device that temporarily stores data. (D.I. 21 at 14). Plaintiff defines "cache storage" as hardware or software memory of a computing device that allows high-speed access of temporarily stored data. (*Id.*). Plaintiff argues that the claims thus recite specific structure that cannot be considered abstract and that Defendant's motion improperly "short circuits" the definition of the claim terms to any generic internal storage. (*Id.*). Plaintiff supports its argument by asserting that the "utility, efficiency, and ease of use in the claims of the '526 patent are in part driven by using already existing download

information from the cache storage, without requiring a user to manually enter the download information." (*Id.*). But the only reference to storage in the specification of the '526 and '254 patents explains that the internal and external storage spaces are comprised of generic components. ('526 patent at 1:31-33, 1:41-45; '254 patent at 1:29-31, 1:41-43). In any event, the proposed "cache" constructions do not make the claims any more or less abstract.

Plaintiff asserts that the combination of elements in the independent claims and the dependent claims result in the improvement of electronic devices. (D.I. 21 at 3). Specifically, Plaintiff contends that the claimed technology makes existing user interfaces on electronic devices more dynamic and efficient in accessing information from the Internet by improving the manner in which devices perform operations to access remote storage. (*Id.*)

Courts must distinguish between claims "directed to an improvement in computer functionality"—which are not abstract—and claims "simply adding conventional computer components to well-known business practices"—which are abstract. *In re TLI*, 823 F.3d at 612. In *Enfish*, in which the Court held that the claims at issue were not directed to an abstract idea, the invention focused on a "specific improvement . . . in how computers could carry out one of their basic functions of storage and retrieval of data," and not on "asserted advances in uses to which existing computer capabilities could be put." 822 F.3d at 1335-36. Even though the invention could be run on a general-purpose computer and was not defined by reference to physical components, the claims were specifically directed to a self-referential table rather than any form of storing tabular data. *Id.* at 1336. The specification taught that the self-referential table functioned differently than conventional database structures and achieved other benefits over conventional databases. *Id.*

Despite Plaintiff's assertions, the claims here use generic technology and do not recite "specific improvements in computer capabilities." Enfish, 822 F.3d at 1337. Plaintiff asserts, "The specification discloses that the download information from the 'cached' storage . . . comes from software modules that obtain download information from web-pages that are open on a wireless device." (D.I. 21 at 8, citing D.I. 15-1, Ex. 1 at 5:13-16). The claims do not, however, identify a "particular improvement in how this is done" with computer technology. See Uniloc USA v. ADP, LLC, 772 F. App'x 890, 897 (Fed. Cir. 2019); see also Accenture Global Servs., GMBH v. Guideware Software, Inc., 728 F.3d 1336, 1345 (Fed. Cir. 2013) (rejecting claims that contained no "detailed software implementation guidelines"). The Supreme Court has rejected the idea that claims become patent eligible simply because they disclose a specific solution to a particular problem. See Bilski, 561 U.S. at 599-601 (concluding that claims fell outside section 101 notwithstanding the fact that they disclosed a very specific method of hedging against price increases); Parker v. Flook, 437 U.S. 584, 593 (1978) (rejecting the argument "that if a process application implements a principle in some specific fashion, it automatically falls within the patentable subject matter of § 101"). Indeed, although the claims at issue in Alice described a specific method for conducting intermediated settlement, the Court nonetheless unanimously concluded that they fell outside § 101. See 134 S. Ct. at 2358-60.

The patents fail to provide any detail on how the software modules, cached storage, webpages, or wireless devices operate or present an improvement over the conventional functionality of each of these components. There is no modification of conventional cache memory or how "download information" is stored therein. And there is no description of how "download information" is obtained other than a passive results-oriented statement that software modules obtain download information which then "becomes available in the cached webpages

[of the wireless device] after the web-browser access[es] the website." (D.I. 15-1, Ex. 1 at 5:13-17). The patent thus appears to describe nothing more than the generic operation of cache memory, as understood by a skilled artisan. *See Symantec Corp.*, 234 F. Supp. 3d at 607-08 (claims ineligible where they relied "on the ordinary storage and transmission capabilities of computers within a network and apply that ordinary functionality in [a] particular context"); *see also WhitServe*, 2019 WL 3342949, at *5.

In summary, the claims essentially describe a wireless device that couples or communicates with a remote storage server and stores or retrieves data from that server. Both claims describe storing data in or retrieving data from a remote location. Thus, the claimed invention describes the well-known and longstanding practice of requesting an institution to obtain data from remote locations and to store that data in storage space assigned to a specific user. "Remotely accessing and retrieving user-specified information is an age-old practice that existed well before the advent of computers and the Internet." *Erie Indem. Co.*, 850 F.3d at 1330. Here, the claims incorporate the addition of generic computer components to do this work. *See Univ. of Fla. Research Found., Inc. v. Gen. Elec. Co.*, 916 F.3d 1363, 1367 (Fed. Cir. 2019). But the addition of such components does not make the claims any less abstract. For the foregoing reasons, I find Claim 1 of the '526 patent and Claim 1 of the '254 patent to be directed to a patent-ineligible abstract idea.

2. Inventive Concept

Defendant contends that there is no support in the pleading, specification, or prosecution history to support Plaintiff's assertion that the patents made existing user interfaces on electronic devices more dynamic or efficient in accessing information from the Internet or that they improved the performance of the computer system itself. (D.I. 24 at 5). According to Defendant,

the claimed combination is merely a conventional arrangement of computing components. (*Id.* at 7). Plaintiff argues that Defendant's focus on the individual components recited in the patents fails to consider the elements of the claims as an ordered combination, which offers an inventive concept. (D.I. 21 at 12). Plaintiff asserts that through the particular arrangement of elements recited, the patents improve the manner in which wireless devices access, retrieve, and store information from the internet to a remote storage server and make existing electronic devices at the time of the invention more dynamic and efficient. (*Id.* at 12-13, 17).

The inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art. *See BASCOM*, 827 F.3d at 1350. In *BASCOM*, the Federal Circuit agreed with the district court that filtering content was an abstract idea because it was a longstanding, well-known method of organizing human behavior. *Id.* at 1348. However, the Federal Circuit found the claim eligible under Step Two, stating that it recited a non-conventional and non-generic ordered combination of known, conventional pieces. *Id.* at 1350. The Federal Circuit characterized the inventive concept as "the installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user." *Id.* In particular, the Federal Circuit noted that, "[b]y taking a prior art filter solution [. . .] and making it more dynamic and efficient [. . .], the claimed invention represents a 'software-based invention[] that improve[s] the performance of the computer itself." *Id.* at 1351.

Plaintiff fails to identify any specific "improvements" in its asserted combination of conventional pieces. *See Enfish*, 822 F.3d at 1336. Nor do the specific components used together provide a different way of using their ordinary roles to achieve the desired results. *See Uniloc*, 772 F. App'x at 898. Plaintiff's claimed "wireless device" is a "cell phone or personal assistant

device (PDA)." ('526 patent at Abstract; '254 patent at Abstract). The use of a wireless device, without more, is not an inventive concept. *See*, *e.g.*, *Sound View Innovations*, *LLC v. Facebook*, *Inc.*, 204 F. Supp. 3d 655, 663 (D. Del. 2016) (finding that advertisements delivered to a specific wireless device "were not inventive concepts sufficient to confer patent eligibility"). The patents describe the internal and external storage spaces, such as "cache storage" and the "storage server," as comprised of generic components such as "hard disk drives, memory sticks, memory[,] etc." ('526 patent at 1:31-33; '254 patent at 1:29-31) or "magnetic hard disk drives, solid state disk[s], optical storage drives, memory card[s], etc." ('526 patent at 1:41-45; '254 patent at 1:41-43). The claimed "wireless link" or "communication link," is described as a "network interconnecting a wireless device and a server" such as "the Internet" or an "intranet." ('526 patent at 2:64-3:6; '254 patent at 2:67-3:2). These are also generic components, used in their ordinary capacity.

Courts have routinely determined that the use of a computer network does not confer eligibility. *See*, *e.g.*, *buySAFE*, *Inc. v. Google*, *Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) ("That a computer receives and sends information over a network—with no further specification—is not even arguably inventive."); *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 792 F.3d 1363, 1368 (Fed. Cir. 2017) ("communication medium" is a "generic computer element[]"); *Ultramercial*, 772 F.3d at 716 ("[T]he use of the Internet is not sufficient to save otherwise abstract claims from ineligibility under § 101."). The use of "program code configured to cause the wireless device to" perform the recited steps also fails to convey an inventive concept. *See*, *e.g.*, *IpLearn LLC v. K12 Inc.*, 76 F. Supp. 3d 525, 535 (D. Del. 2014) (finding that the use of "computers, networks, the Internet, or computer program code" was generic and insufficient for eligibility); *TS Patents LLC v. Yahoo! Inc.*, 279 F. Supp. 3d 968, 972-73 (N.D. Cal. 2017)

(finding that the use of "program code" was insufficient to recite an inventive concept), *aff'd*, 731 F. App'x 978 (Fed. Cir. 2018). The claims describe generic components operating in their expected capacity, which provides no inventive concept. *See Symantec Corp.*, 234 F. Supp. 3d at 608 (finding claims ineligible where individual components are "conventional, generic, and operate as expected.").

Finally, storing, displaying, and retrieving content are among the routine functions of generic computers. *See Mortg. Grader, Inc. v. First Choice Loan Servs.*, 811 F.3d 1318, 1324-25 (Fed. Cir. 2016) (no inventive concept in claims reciting "stor[ing]" and "display[ing]" data); *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1347 (Fed. Cir. 2018) ("Offering a user the ability to select information to be displayed is one of the 'most basic functions of a computer.' . . [Plaintiff] does not, and cannot, contend that it is arguably inventive to enable a person to access information over a network through a user interface."); *In re TLI*, 823 F.3d at 612 (stating that servers merely "storing, receiving, and extracting data" were routine computer functions as of 1997).

Plaintiff asserts that in addition to the patent-eligible inventive concept of claim 1 of the '526 patent, independent claim 11 and dependent claims 2-10 and 12-20 add further limitations which further demonstrate patent eligibility. (D.I. 21 at 13-14). Plaintiff also asserts that in addition to the patent-eligible inventive concept of claim 1 of the '254 patent, independent claims 9 and 16, and dependent claims 2-8, 10-15, and 17-20 add limitations which further demonstrate patent-eligibility. (*Id.* at 17-18).

First, since only claim 1 of each of the '526 and '254 patents are expressly asserted,

Plaintiff's argument that other, non-asserted independent claims are patent eligible is not directly
relevant here. Second, the limitations Plaintiff identifies in the dependent claims do not offer

inventive concepts. Claim 3 of the '526 patent includes claim element "controls a plurality of storage devices," which, according to Plaintiff, adds the inventive concept of a remote storage server controlling more than one storage device while providing operations on storage space allocated to any given user. ('526 patent at 6:32-34; D.I. 21 at 13). There is no explanation of how this is done, however. Claim 2 claims ease of access to multimedia or streaming data, without a specific improvement to the technology. ('526 patent at 6:16-19). Similarly, Claim 4 claims elements regarding sending download information for a file from the cache. (Id. at 6:24-31). "[S]ending and receiving information" over a network are "routine computer functions," and there is no description of how this is improved upon. Erie Indem. Co., 850 F.3d at 1329. Claims 6-8 and 10 add claim elements related to specific file system operations for creating, renaming, editing, and modifying files and folders on remote storage. ('526 patent at 6:35-39, 6:40-44, 6:45-49, 6:53-57). This is simply a recitation of the ordinary capabilities of computers, applied in a particular context. See Symantec Corp., 234 F. Supp. 3d at 607-08. Claim 9 claims different types of user interfaces including a web-browser that allows access to remote storage. ('526 patent at 6:50-52). The web-browser is described as "any suitable software tool" and is not claimed to be used in an unconventional way. (*Id.* at 3:26-29).⁵

As an ordered combination, the claim limitations "add nothing that is not already present when the elements are considered separately," but rather elaborate on known, conventional steps. See Apple Inc. v. Ameranth, Inc., 842 F.3d 1229, 1241 (Fed. Cir. 2016). Thus, nothing in the claims provides the necessary inventive concept to render the claims patent-eligible under § 101. See FairWarning IP, LLC v. Iatric Sys., Inc., 839 F.3d 1089, 1097 (Fed. Cir. 2016).

⁵ As to the '254 patent, the analysis is similar. See page 10 supra, describing dependent claims 2-8.

In sum, none of the claimed elements, taken individual or as an ordered combination, provide the required inventive concept "sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself." *Alice*, 573 U.S. at 218. The patents do not state how any improvement is accomplished. And none of the alleged improvements "enables a computer . . . to do things it could not do before." *Finjan*, 879 F.3d at 1305. The claims contain no inventive concept because they are not directed to "an improvement in computers as tools," but instead assert an "independently abstract idea[] that use[s] computers as tools." *Elec. Power Grp.*, 830 F.3d at 1354. Thus, I find that the '526 and '254 patents claim the abstract idea of storing and retrieving data from a remote location, implemented on conventional, well-known hardware, adding no inventive concept.

B. The '590 Patent

The '590 patent is titled "Method and System for Formatting Messages Into Stylized Messages for Print Out." The patent describes methods for formatting emails using templates for delivery to a printer. (*See* '590 patent at Abstract, 2:40-43). Asserted Claim 1 of the '590 patent⁶ recites:

A method of delivering a message comprising:

receiving an email message directed to a preselected recipient at a central service, wherein the recipient is specified by an email address associated with the recipient, and wherein the email message comprises one or more elements;

resolving all elements of the email message into one or more categories of elements;

formatting the email message into a printer-friendly format for delivery of the message to the recipient's printer by placing the elements of the email message into a selected template, wherein the template comprises a plurality of spaces configured to receive a preselected category of elements and the template is selected based on the elements of the email message;

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⁶ Claims 2-74 all ultimately depend from Claim 1. I find Claim 1 is representative of all claims in the patent.

transmitting the formatted message to the recipient's printer over a network, wherein the recipient's printer comprises a printing device owned or possessed by the recipient; and sending instructions to print the formatted message at the recipient's printer for direct receipt by the recipient.

(Id. at 9:36-56).

Plaintiff states that a person of ordinary skill in the art would understand that the terms "printing device" or "recipient's printer over a network" requires "a non-conventional printer that is not a generic computer." (D.I. 21 at 25). "Using this construction," Plaintiff contends that the claims recite a specific structure that cannot be considered abstract. (*Id.*). First, it seems to me self-evident that "a non-conventional printer" cannot be a valid construction. Second, the specification contradicts Plaintiff's position, describing "printer" as "an ink-jet printer, a dye-sublimation printer, a laser printer, or the like." ('590 patent at 2:24-25). Thus, based on the words of the specification, I cannot accept Plaintiff's contention that a "printing device" and "printer" mean a non-conventional printer. I will reject this construction as implausible in light of the specification.⁷

1. Abstract Idea

Defendant argues that the Claim 1 of the '590 patent is directed to the abstract idea of "receiving, reformatting and delivering a message." (D.I. 18 at 18). Plaintiff asserts that the '590 patent claims are non-abstract because they "include a combination of centralized automated service for printing that allows for dynamic customization of print messages and operation of network printing." (D.I. 21 at 19). Plaintiff contends that the technology brings "efficiencies not only for formatting the message into print format but also to receive in email format from one

⁷ Even if Plaintiff were right that the construction of "printing device" was "non-conventional printing device," the result of the analysis would be the same.

and forward on in print format to another." (*Id.* at 20). Plaintiff argues that Claim 1 of the '590 patent and claims dependent therefrom result in the improvement of providing a messaging or communication service in print format to people without computers, at the time of the invention. (*Id.* at 22).

The '590 patent describes the process of formatting emails using templates for delivery to a printer. ('590 patent at Abstract, 2:40-43). The specification describes receiving a message, identifying certain elements in that message, reorganizing those elements into a specific format, and transmitting the reorganized message to another device. (*See id.*). The '590 patent states that "accessing remote network printers for senior citizens not familiar with computer technology[] was not possible through computer networks at the time of the invention." (*Id.* at 1:20-38).

The patent essentially recites manipulating or reorganizing data, which the Federal Circuit has rejected as abstract ideas. *See Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014) (finding claims unpatentable and directed to an abstract idea where they recited "taking existing information . . . and organizing this information into a new form"); *Capital One Fin. Corp.*, 850 F.3d at 1340 (asserted claims were, "at their core, directed to the abstract idea of collecting, displaying, and manipulating data"). Nor does the patent recite any particular improvement in the functioning of the technology used to reorganize data. *See Elec. Power Grp.*, 830 F.3d at 1354 (finding claim "merely presenting the results of abstract processes of collecting and analyzing information without more" and "not [claiming] any particular assertedly inventive technology for performing those functions" to be abstract); *Interval Licensing*, 896 F.3d at 1345 (collection, organization, and display of two sets of information on a generic display device is abstract absent a "specific improvement to the way computers [or other technologies] operate.").

The Federal Circuit has found similar elements as those claimed in the '590 patent to be directed to an abstract idea. In *RecogniCorp, LLC v. Nintendo Co.*, the claims were directed to an abstract idea where a user displays images on a first display, assigns image codes to the images through an interface using a mathematical formula, and then reproduces the image based on the codes. 855 F.3d 1322, 1326 (Fed. Cir. 2017). In *Content Extraction*, "(1) collecting data, (2) recognizing certain data within the collected data set, and (3) storing that recognized data in a memory" was an abstract idea because "data collection, recognition, and storage is undisputedly well-known" and "humans have always performed these functions." 776 F.3d at 1347. And while a computer may make the process of receiving, reformatting, and delivering a message more "efficient" (D.I. 21 at 20), that does not make the idea patent-eligible. *See, e.g., Capital One Bank*, 792 F.3d at 1370 ("[O]ur precedent is clear that merely adding computer functionality to increase the speed or efficiency of the process does not confer patent eligibility on an otherwise abstract idea.").

In *Enfish*, the Federal Circuit found the claims at issue non-abstract because they focused on a specific improvement in how computers could carry out one of their basic functions of storage and retrieval of data. 822 F.3d at 1335-36. Claims are not directed to an abstract idea if "the focus of the claims is on the specific asserted improvement in computer capabilities . . . [rather than] on a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool." *Id.* at 1336. Plaintiff argues that the '590 patent focuses on a particular network printer implementation that utilizes simple email message commands at one end to provide a "hassle-free" remote printing experience for another recipient. (D.I. 21 at 21). In order to do this, the patent establishes a communication pathway between a person with a computer sending email messages and another person without a computer. (*Id.*). But express disclosures in

the patent describe conventional communications pathways between the "centralized service" and printer. (*See* '590 patent at 2:30-33). For example, the printer "is connected to the [centralized] service [via a network] such as the Internet, DSL, a phone line, wireless WAN or other means known in the art." (*Id.*). Unlike *Enfish*, Plaintiff fails to identify specific "improvements" in its asserted combination of conventional pieces. *See* 822 F.3d at 1335-36.

Results-focused, functional claim language has been a "frequent feature" of claims found to be ineligible under § 101. *Elec. Power Grp.*, 830 F.3d at 1356. Unlike *Thales Visionix Inc. v. United States*, where the court found the claims eligible because they "specif[ied] a particular configuration of [sensors] and a particular method of using the raw data [to] more accurately calculate the position and orientation of an object," the '590 patent does not describe any specific configuration or the processing of "raw data." 850 F.3d 1343, 1349 (Fed. Cir. 2017). Instead, the patent recites generic steps to place the various elements of an email into a template for printing, with the use of a computer. *See, e.g.*, '590 patent at 9:36-56 ("[F]ormatting the email message by placing the elements of the email message into a selected template, wherein the template comprises a plurality of spaces configured to receive a preselected category of elements "). 8

For the foregoing reasons, I find Claim 1 of the '590 patent to be directed to a patent-ineligible abstract idea.

2. Inventive Concept

The claims of the '590 patent add nothing inventive, whether as individual elements or as an ordered combination.

themes, and other forms of template customization. The dependent claims therefore do not add anything to render the claim non-abstract.

⁸ The dependent claims further describe the process of formatting elements of the email such that they fit into a selected template, adjusting sizes of photographs to be transferred into the template, allowing the user to select a template based on season, holiday, calendar, or other

Plaintiff argues that the purported invention offers an improvement in computer capabilities through the use of a network printer that is associated with a recipient email address and that that Defendant did not "properly attribut[e] the functionality of a remote network printer to accept email messages from another." (D.I. 21 at 23-24). Plaintiff contends that the inventive concept "includes hassle-free configuration of printers and receipt of print messages that are remotely controlled by another through a central service on a network." (*Id.* at 19). Plaintiff argues that the combination of elements "resulted in the enhancement or improvement of providing a messaging or communication service in print format to people without computers [and thus] established a protocol of communication between an email message from a person translated to a printed output for another." (*Id.* at 22).

The specification identifies the problem that "[c]urrent systems [for transmitting data to users without a computer] are not able to receive email messages that are formatted into selected templates." ('590 patent at 1:31-35). But there is no support in the specification that the patent offers a tangible solution to that problem or that it describes a "protocol of communication." Instead, the patent discloses a generic computer for formatting an email into a template for delivery to a printer. (*Id.* at 1:12-17).

In *DDR Holdings, LLC v. Hotels.com, L.P.*, the Federal Circuit found that the patented claims satisfied *Alice* step two because "the claimed solution amounts to an inventive concept for resolving [a] particular Internet-centric problem." 773 F.3d 1245, 1259 (Fed. Cir. 2014). The '590 patent states that while "[c]urrent systems exist for the transmission of photographs to users without a computer or to users who are unable to sufficiently operate a computer . . . these systems are not able to receive email messages that are formatted into selected templates." ('590 patent at 1:30-35). But receiving data via email and reorganizing that data for delivery, without

more, does not convey an inventive concept. *See, e.g., buySAFE*, 765 F.3d at 1355 (Fed. Cir. 2014) ("That a computer receives and sends information over a network—with no further specification—is not even arguably inventive."). There is nothing in the specification that supports the idea that the patent offers a technological solution to that problem, or an explanation of how the formatting takes place.

Nor does the '590 patent claim to have invented a remote network printer capable of accepting messages. The prosecution history demonstrates that remote network printers capable of accepting emails were known. (*See* D.I. 25-1, Ex. A at 11-12). In *BASCOM*, the claimed invention took a prior art filter solution and made it more dynamic and efficient through the use of a software-based invention that improved the performance of the computer itself. 827 F.3d at 1351. Here, there is no support for the assertion that a prior art solution was improved upon in any way. The recited generic computer components each perform their conventional functions in performing the recited steps of the claim. There is no software-based solution to the purported problem of being previously unable to receive formatted content or format content for transmission.

Plaintiff contends that a narrow focus on individual components of the invention fails to consider the whole, which recites a "specific improvement to the way computers operate." (D.I. 21 at 24, citing *Enfish*, 822 F.3d at 1336). In *Enfish*, the claims were directed to an improvement in the computer's functioning and specifically directed to a database structure that functioned differently, and better than, conventional database structures. 822 F.3d at 1336. Unlike *Enfish*, the claims here recite no specific improvement in computer functioning, mentioning only generic computer components used in conventional ways and for their conventional purposes. *See id*.

The specific components used together do not provide a different way of using their ordinary roles to achieve the desired results. *See Uniloc*, 772 F. App'x at 898.

"[A]n inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces." *BASCOM*, 827 F.3d at 1350. In *BASCOM*, the patent owner "alleged that an inventive concept can be found in the ordered combination of claim limitations that transform the abstract idea of filtering content into a particular, practical application of that abstract idea." *Id.* at 1352. The Court found the allegation sufficient to survive a motion to dismiss. *Id.* The Court explained that the placement of a filtering tool "at a specific location," and configured in a particular way, evidenced an inventive concept because the record before the Court did not demonstrate that the "specific method of filtering" claimed had been conventional or generic. *Id.* at 1350.

Similarly, in *Cellspin Soft, Inc. v. Fitbit, Inc.*, the Federal Circuit found claims had an inventive concept when "they recite a specific, plausibly inventive way of arranging devices and using protocols rather than the general idea of capturing, transferring, and publishing data." 927 F.3d 1306, 131 (Fed. Cir. 2019). Cellspin's allegations identified several ways in which its application of capturing, transferring, and publishing data was unconventional. *Id.* at 1316. For example, prior art devices were "inferior" because they were comparatively bulky and expensive. *Id.* The claimed solution was an unconventional two-step, two-device structure that was discussed in the specification. *Id.* Cellspin thus made specific, plausible factual allegations about why aspects of its claimed inventions were not conventional. *Id.* at 1317-18.

Here, the concept of formatting appears to be applied to emails. Unlike *BASCOM* and *Cellspin*, there are no specific allegations, or support in the specification, that demonstrate that

any of the components are used in a specific, unconventional, or non-generic way. *See id*; *BASCOM*, 827 F.3d at 1350.

Plaintiff argues that dependent claims 2-75 "add further limitations that are more than sufficient to render these claims eligible." (D.I. 21 at 25). Plaintiff asserts that claims 6-9, 12, 18 and 63 include the claim element "template family" to format messages "based on different algorithms specifically taught in the specification." (*Id.*; citing '590 patent at 5:23-65). But what is described in the specification cannot be characterized as an algorithm where there is no explanation of how the claimed function actually works. These claims describe additional results-oriented steps that describe different known templates, known types of formatting methods, rules for selecting templates, rules for identifying elements and storing and applying different user preferences and templates.

The claims and the specification do not provide any detail for implementation. (*See id.* at 5:23-65). For example, the specification states that the size of photos are "identifie[d]... by reading the metadata in their files," and the service "automatically selects the appropriate template in the template family." (*Id.* at 5:37-40). Plaintiff asserts that dependent claims 59-65 add limitations demonstrating patent eligibility because these claims "address user preference settings for the sender of an email message." (D.I. 21 at 24). Claim 59 claims the method of claim 1, further comprising: "storing a set of user preferences at the central service; and applying one or more user preferences to the formatted message." ('590 patent at 12:55-58). Other claims include additional claim elements such as "order of the elements," time the message is sent, and "event data." (*Id.*). These assertions suffer from the same deficiency, adding nothing to describe an inventive concept nor any detail for implementation.

Storing, formatting and transmitting data is insufficient under *Alice* Step Two. *See*, *e.g.*, *Univ. of Fla.*, 916 F.3d at 1367-68 (no inventive step in claims for converting data from one format into another). For the foregoing reasons, I find Claim 1 of the '590 patent directed to the abstract idea of formatting emails using templates for delivery to a printer, with no inventive concept. All claims of the '590 patent claim patent-ineligible subject matter.

C. The '225 Patent

The '225 patent is titled "Disk System Adapted to be Directly Attached to Network."

Asserted Claim 1 of the '225 patent⁹ recites:

A network-attached device (NAD) access system wherein a host, having an internal host system bus and running an operating system, controls an external device through a carrying general-purpose network traffic using a certain network protocol, the system comprising:

a network interface card (NIC) installed at the host for providing a general purpose network connection between the host and the network and via the network to other devices coupled to the network;

a network-attached device (NAD) having a data storage to store data, the NAD coupled to the network for receiving device level access commands from the host in data link frames according to certain network protocol through the network; and [sic]

a device driver, running at the host, for creating a virtual host bus adapter in software controlling the NAD through the network via the NIC, the device driver enumerating NAD that are available over the network, not directly attached to the host internal system bus, to make the host recognize the NAD as a host local device;

the virtual host bus adapter controlling the NAD in a way indistinguishable from the way as a physical host bus adapter device controls device so that the host recognizes the NAD as if it is a local device connected directly to the system bus of the host.

('225 patent at 23:2-26).

 $^{^{9}}$ There are twenty-one dependent claims in addition to the one independent claim.

The specification describes various problems with the prior art. ¹⁰ Tape drives and CD drives had performance issues compared to a hard-disk drive. (*Id.* at 1:25-27). Increasing the capacity of hard-disk drives was problematic. (*Id* at 1:27-29). Adding a Network Attached Storage product has "many shortcomings," which the specification describes. (*Id.* at 1:44-56) Using the Storage Area Network technology has "shortcomings," including expense. (*Id.* at 1:57-65). The invention claims to be an improvement in that it meets the "need for an interface that allows a disk system to be directly attached to a network, while still being accessed like a local disk without the need of adding an additional file server or special equipment." (*Id.* at 1:66-2:2). The Summary of the Invention claims that the NAD system accomplishes those goals. (*Id.* at 2:6-31).

1. Abstract Idea

The parties dispute whether Claim 1 of the '225 patent is directed to the abstract idea of communicating instructions to a remote recipient in the same manner as if to a local recipient. According to Plaintiff, the patent is directed to solving a problem with computer technology, *i.e.*, limited storage space on a local device and "kludgy" access to network attached storage at the time of the invention. (D.I. 21 at 26). I think it is plausible that the invention is directed to expanding storage capacity

The specification describes certain embodiments of the claim. Defendant argues that the embodiments do not matter; the claims amount to "results-oriented limitations" that are essentially "instructions for performing the abstract idea [of communication] using a computer." (D.I. 24 at 13, citing *ChargePoint*, 920 F.3d at 769). Defendant argues that the claims do not recite specific details of how the generic components work to address the problem that Plaintiff

¹⁰ The patent claims priority to a provisional application in 2000. ('225 patent at 1:7-11).

identifies, such that the claim might be rendered non-abstract. *See Univ. of Fla.*, 916 F.3d at 1368 (finding claims to be "directed to an abstract idea" where "[n]either the [] patent, nor its claims, explains *how* the drivers do the conversion that UFRF points to.").

Defendant points out that the text for the "device driver" limitation recites: (1) a device driver that creates a virtual host bus adapter in software; (2) that controls the NAD through a network; (3) the device driver establishing the number of NADs available over the network; and (4) making the host recognize the NAD as a host local device. (D.I. 24 at 14-15). Defendant argues that the claim fails to explain how the recited software actually accomplishes these tasks. See Capital One Fin. Corp., 850 F.3d at 1342 ("[T]he claim language here provides only a results-oriented solution, with insufficient detail for how a computer accomplishes it. Our law demands more."). To explain how the device driver achieves the desired result, the claims state only that the virtual adapter "control[s] the NAD in a way indistinguishable from the way as a physical host bus adapter device controls device so that the host recognizes the NAD as if it is a local device." This may not be enough. See Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC, 874 F.3d 1329, 1337 (Fed. Cir. 2017) ("The claim requires the functional results of 'converting,' 'routing,' 'controlling,' 'monitoring,' and 'accumulating records,' but does not sufficiently describe how to achieve these results in a non-abstract way."). But I cannot say that is so on a motion to dismiss. Among other things, I cannot say what a person of ordinary skill in the art would understand from the specification. See Visual Memory LLC v. NVIDIA Corp., 867 F.3d 1253, 1261 (Fed. Cir. 2017) (implementation details known to ordinary skilled artisan need not be taught by the patent). Consequently, I cannot say what is required to be disclosed about controlling physical host bus adapters. It may be that SynKloud's proposed construction for "virtual host bus adapter" provides no detail to inform a person of ordinary skill in the art about

how "software for the host bus adapter . . . interacts with the NAD" or how it achieves the desired result of indistinguishably controlling the NAD in a way so that the host recognizes the NAD as if it were a local device. *See Interval Licensing*, 896 F.3d at 1345-46. But I cannot say on a motion to dismiss that Defendant is right. I cannot now conclude that the patent claims are directed to an abstract idea rather than a technological improvement in computer technology. *See Visual Memory*, 867 F.3d at 1259 ("improved computer memory system" not abstract); *DDR Holdings*, *LLC v. Hotels.com*, *L.P.*, 773 F.3d 1245, 1259 (Fed. Cir. 2014) (making two web pages look the same not abstract).

Thus, I do not find Claim 1 of the '225 patent to be directed to a patent-ineligible abstract idea.

2. Inventive Concept

In view of my conclusion above, I do not need to address the inventive concept portion of the analysis. I will say, though, that I have thought about this too, and I doubt that I would be able to conclude on a motion to dismiss that it is implausible that there is an inventive concept.

IV. CONCLUSION

In my opinion, Claim 1 of the '590 patent is obviously patent-ineligible. Claim 1 of the '526 patent and Claim 1 of the '254 patent are also patent-ineligible, albeit less obviously than Claim 1 of the '590 patent. Claim 1 of the '225 patent may be patent-ineligible, but I cannot conclude that that is the case on a motion to dismiss. For the foregoing reasons, I will grant-in-part and deny-in-part Defendant's motion to dismiss (D.I. 17) and I dismiss Counts 1, 2, and 4 of Plaintiff's Amended Complaint. Claims 1 to 74 of the '590 patent, Claims 1 to 10 of the '526

¹¹ I note that Plaintiff's complaint makes no allegations related to patent eligibility. I also note that Plaintiff makes no request that it be given leave to amend its complaint should any part of the motion to dismiss be granted.

patent, and Claims 1 to 8 of the '254 patent are invalid for claiming patent-ineligible subject matter.

An accompanying order will be entered.