IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

KOM SOFTWARE INC.,	§	
	§	
Plaintiff,	§	
	§	
v.	§	Civil Action No. 18-160-WCB
	§	
NETAPP, INC.,	§	
	§	
Defendant.	§	
	§	
	§	

MEMORANDUM OPINION AND ORDER

In this patent infringement action, defendant NetApp, Inc., has moved for judgment on the pleadings under Federal Rule of Civil Procedure 12(c). Dkt. No. 145. NetApp argues that the patent claims asserted by plaintiff KOM Software Inc. are invalid under 35 U.S.C. § 101 for being directed to patent-ineligible subject matter. For the reasons set forth below, the motion is GRANTED IN PART and DENIED IN PART.

I. Background

In its first amended complaint, KOM originally asserted claims from seven patents against NetApp and two other defendants who have since been dismissed from the case. Five of those seven patents are no longer asserted in this case. The remaining asserted claims are claims 5, 6, and 9 of U.S. Patent No. 6,654,864 ("the '864 patent") and claims 4, 34, 69, and 103 of U.S. Patent No. 9,361,243 ("the '243 patent"). Both patents are generally directed to restricting access to files contained within a computer data storage medium.

As explained in the specification of the '864 patent, a software application may seek to access and modify various files stored in a storage medium, such as a hard drive or CD-ROM,

while the medium is running. '864 patent, col. 1, ll. 15–41. In many operating systems, including "Windows NT," the drivers for the storage devices are "hidden from applications by a protected subsystem." *Id.* at col. 1, ll. 30–34. That is, the applications and the storage devices do not communicate directly with one another; instead, "[e]ach communicates with the operating system independently." *Id.* at col. 1, ll. 43–47.

In a typical operating system, a software application will submit a request to open a file through the application's protected subsystem. The request is sent to the "IO [input/output] system services," which in turn direct the "IO Manager" to communicate with the device drivers. *Id.* at col. 4, ll. 25–42. As the specification of the '864 patent notes, prior art systems would require the device drivers to "deal[] with file system commands which cannot be completed," because all access requests were sent through the IO manager to the device drivers. *See id.* at col. 7, line 53, through col. 8, line 5.

The '864 and '243 patents disclose implementing a "trap layer" between the application layer and the file system layer of the computer system. *See* '864 patent, col. 7, ll. 53–58. The trap layer prevents invalid requests from being passed to the device drivers. Based on the capabilities of the storage device that is being accessed, the trap layer can block some requests and modify other requests. *Id.* at col. 7, ll. 60–64. For example, a particular storage device may permit files to be read and written but not deleted. *Id.* at col. 8, ll. 8–10. In such a device, the trap layer that is disclosed in the asserted patents would "intercept" a request to delete a file and would return an error message to the application that was trying to access the device. *Id.* at col. 8, ll. 14–21. Similarly, if the device supports "read access" but not "write access," the trap layer could modify a request to open a file with "read/write access" by converting that request into one seeking "read-only access." *See id.* at col. 7, ll. 44–46.

Claim 5 of the ’864 patent is generally representative of the asserted claims of the ’864 patent for purposes of the present motion. That claim recites as follows:

> 5. A method of restricting access by a computer to a storage medium other than a write once medium in communication with the computer, the method comprising the steps of:
>
> providing an indication of a data write access privilege for the entire logical storage medium indicating a disabled operation relating to alteration of a portion of each file stored within the logical storage medium, the indication other than a read only indication; and
>
> restricting file access to each file within the logical storage medium in accordance with the same indication while allowing access to free space portions of the same logical storage medium.

’864 patent, cl. 5.

Claim 66 of the ’243 patent, from which asserted claims 69 and 103 depend, is generally representative of the asserted claims of the ’243 patent for purposes of the present motion. That claim recites as follows:

> 66. A data processing system configured to apply a computer file system operation access privilege to a computer storage medium, comprises:
>
> at least one computer processor configured to associate the computer file system operation access privilege with at least a portion of the computer storage medium;
>
> said at least one computer processor configured to intercept, by at least one computer file system trap layer or at least one computer file system filter layer, an attempted operation on said at least a portion of the computer storage medium,
>
> > wherein said interception occurs regardless of an identity of a user that attempts the attempted operation;
> >
> > said at least one computer processor configured to compare the attempted operation to the computer file system operation access privilege; and
> >
> > said at least one computer processor configured to allow, or deny the attempted operation based on the comparison of the attempted operation to the computer file system operation access privilege.

’243 patent, cl. 66.

NetApp contends that all the asserted claims of the '864 and '243 patents are invalid under 35 U.S.C. § 101 because, in NetApp's view, they are directed to an abstract idea and do not contain an inventive concept sufficient to render the claims patent-eligible.

II. Legal Standard

Under Federal Rule of Civil Procedure 12(c), "[a]fter the pleadings are closed—but early enough not to delay trial—a party may move for judgment on the pleadings." A Rule 12(c) motion "will not be granted unless the movant clearly establishes that no material issue of fact remains to be resolved and that [it] is entitled to judgment as a matter of law." *Jablonski v. Pan Am. World Airways, Inc.*, 863 F.2d 289, 290 (3d Cir. 1988) (internal quotation marks and citation omitted). The standard that applies to a Rule 12(b)(6) motion to dismiss for failure to state a claim also applies to motions brought under Rule 12(c); that is, in the common situation in which the defendant moves to dismiss the complaint, the court "must accept the truth of all factual allegations in the complaint and must draw all reasonable inferences in favor of the non-movant." *Revell v. Port Auth. of New York & New Jersey*, 598 F.3d 128, 134 (3d Cir. 2010). More generally, "[t]he purpose of judgment on the pleadings is to dispose of claims where the material facts are undisputed and judgment can be entered on the competing pleadings and exhibits thereto, and documents incorporated by reference." *Venetec Int'l, Inc. v. Nexus Med., LLC*, 541 F. Supp. 2d 612, 617 (D. Del. 2008).

Patent eligibility under 35 U.S.C. § 101 is a question of law, based on underlying facts. *See Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018); *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1364–65 (Fed. Cir. 2018). Disputes over eligibility can be, and frequently are, resolved on a Rule 12(b)(6) or Rule 12(c) motion "where the undisputed facts, considered under the standards required by that Rule, require a holding of ineligibility under the

substantive standards of law." *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018) (citing cases).

III. Patent Eligibility Under 35 U.S.C § 101

A. Principles

Section 101 of the Patent Act defines patent-eligible subject matter. It states: "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 therefore, subject to the conditions and requirements of this title." 35 U.S.C. § 101. The Supreme Court has interpreted that provision to carve out exceptions to that broad characterization of patentable subject matter for "[l]aws of nature, natural phenomena, and abstract ideas." *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014) (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)).

The framework for determining whether a patent is directed to an unpatentable abstract idea is well settled. The Supreme Court's decision in *Alice* established the now-familiar two-step test for patentability in that context. The first step entails determining whether the claim at issue is directed to an "abstract idea." The second step entails determining whether the claim contains an "inventive concept" that removes the claimed subject matter from the realm of abstraction. *Alice*, 573 U.S. at 217–18; *see also Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.*, 566 U.S. 66, 72–73 (2012).

1. Abstract Idea

Neither the Supreme Court nor the Federal Circuit has ventured a single, comprehensive definition of an "abstract idea." *See id.* at 221 ("[W]e need not labor to delimit the precise contours of the 'abstract ideas' category in this case."); *Bilski v. Kappos*, 561 U.S. 593, 621 (Stevens, J.,

concurring in the judgment) ("The Court . . . never provides a satisfying account of what constitutes an abstract idea."); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2018) ("We need not define the outer limits of 'abstract idea . . . .'"); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1337, 1334 (Fed. Cir. 2018) ("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 . . . ."). Rather than a unitary test, what has emerged from the cases applying section 101 is a group of related principles that can be applied in gauging whether a patent claim is directed to an abstract idea. Those general principles that most directly apply to this case are the following:

First, the courts have characterized "method[s] of organizing human activity" as abstract. *See Alice*, 573 U.S. at 220; *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1285 (Fed. Cir. 2018). For example, the courts have identified fundamental economic and business practices as abstract ideas. *See SAP Am.*, 898 F.3d at 1166; *Intell. Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1313 (Fed. Cir. 2016). Such business practices can include relatively specific functions such as disseminating regionally broadcasted content to users outside the region, *see Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1261–62 (Fed. Cir. 2016); classifying an image and storing the image based on its classification, *see In re TLI Commc'ns LLC Pat. Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016); or managing a bingo game, *see Planet Bingo, LLC v. VKGS LLC*, 576 F. App'x 1005, 1008 (Fed. Cir. 2014).

Applying that principle to patents that claim the use of computers in performing particular activities, courts have held that simply implementing particular economic practices on a computer does not make those practices patent-eligible. *See BSG Tech*, 899 F.3d at 1285 ("If a claimed invention only performs an abstract idea on a generic computer, the invention is directed to an

abstract idea at step one" of *Alice*."); *Fair Warning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093 (Fed. Cir. 2016); *TLI*, 823 F.3d at 612; *Enfish*, 822 F.3d at 1338.

Second, as applied to computer-related applications, the courts have looked to whether the claim in question is directed to an improvement in computer technology as opposed to simply providing for the use of a computer to perform "economic or other tasks for which a computer is used in its ordinary capacity." *Enfish*, 822 F.3d at 1336; *see also Universal Secure Registry LLC v. Apple Inc.*, 10 F.4th 1342, 1357 (Fed. Cir. 2021); *Yu v. Apple Inc.*, 1 F.4th 1040, 1044 (Fed. Cir. 2021); *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1316 (Fed. Cir. 2016). Where the claims at issue provide for an improvement in the operation of a computer, such as a new memory system, a new type of virus scan, or a new type of interface that makes a computer function more accessible, the Federal Circuit has found the claims patent-eligible. *See Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1007–11 (Fed. Cir. 2018) (methods for making electronic spreadsheets more accessible); *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361–63 (Fed. Cir. 2018) (improved display devices); *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1303–06 (Fed. Cir. 2018) (novel method of virus scanning); *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1258–60 (Fed. Cir. 2017) (improved computer memory system).

Third, again in the field of computer-related applications, the Federal Circuit has held that claims are directed to an abstract idea if they are "directed to collection of information, comprehending the meaning of that collected information, and indication of the results, all on a generic computer network operating in its normal, expected manner." *Int'l Bus. Machines Corp. v. Zillow Grp., Inc.*, 50 F.4th 1371, 1378 (Fed. Cir. 2022) (quoting *In re Killian*, 45 F.4th 1373, 1380 (Fed. Cir. 2022)); *see also SAP Am.*, 898 F.3d at 1167 ("[C]laims focused on 'collecting

information, analyzing it, and displaying certain results of the collection and analysis' are directed to an abstract idea.") (quoting *Elec. Power Grp.*, 830 F.3d at 1353–54); *Trading Techs. Int'l, Inc. v. IBG, LLC*, 921 F.3d 1378, 1385 (Fed. Cir. 2019); *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1345 (Fed. Cir. 2018); *Fair Warning IP*, 839 F.3d at 1093.

Fourth, and more generally, in determining whether a method claim is directed to an abstract idea, the Federal Circuit has focused on whether the claim is purely functional in nature or is sufficiently concrete or specific to be directed to a patent-eligible process rather than a patent-ineligible result. For example, in *SAP America*, 898 F.3d at 1167, the court asked whether the claim had "the specificity required to transform [it] from one claiming only a result to one claiming a way of achieving it." To answer that question, the Federal Circuit has directed courts to "look to whether the claims focus on a specific means or method, or are instead directed to a result or effect that itself is the abstract idea and merely invokes generic processes and machinery." *See also Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017); *McRO*, 837 F.3d at 1314 ("We . . . look to whether the claims in these patents focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery."); *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1244 (Fed. Cir. 2016) (claim that "calls for the desired result of associating a customer's order with said customer, and does not attempt to claim any method for achieving that result," is abstract, and thus ineligible for patenting); *see generally Diamond v. Diehr*, 450 U.S. 175, 182 n.7 (1981) (A patent may issue "for the means or method of producing a certain result or effect, and not for the result or effect produced." (citation omitted)); *Le Roy v. Tatham*, 55 U.S. 156, 175 (1853) ("A patent is not good for an effect, or the result of a

certain process" because such patents "would prohibit all other persons from making the same thing by any means whatsoever.").

Fifth, and relatedly, "the concern that drives" the judicial exceptions to patentability is "one of preemption." *Alice*, 573 U.S. at 216; *see also ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 766 (Fed. Cir. 2019); *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). In determining whether a particular invention is directed to an abstract idea, it is therefore important to ask whether according patent protection to the claimed subject matter would have a broad preemptive effect on future innovation in the same field. *See Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1341 (Fed. Cir. 2013).

2. Inventive Concept

If the court determines that a claim is directed to an abstract idea, the court proceeds to *Alice* step two. That step requires the court "to examine the elements of the claim to determine whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Alice*, 573 U.S. at 221 (quoting *Mayo*, 566 U.S. at 72, 78–79).

The "inventive concept" is "an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.'" *Alice*, 573 U.S. at 217–18 (quoting *Mayo*, 566 U.S. at 72). That step serves to ensure that the claim is directed to more than merely implementing an abstract idea using "well-understood, routine, [and] conventional activities previously known in the industry." *Coop. Ent., Inc. v. Kollective Tech., Inc.*, 50 F.4th 127, 130 (Fed. Cir. 2022) (quoting *Alice*, 573 U.S. at 225). That is, *Alice* step two requires the claimed invention to do more than combine known techniques that "yield[] only expected results," *Universal Secure Registry*, 10 F.4th at 1353; instead, it must "focus on a specific means or method that improves the relevant technology," *Weisner v. Google*

LLC, 51 F.4th 1073, 1083 (Fed. Cir. 2022) (citation omitted). In particular, the Federal Circuit has asked whether the claim or claims at issue are "directed to a technological solution to a technological problem." *cxLoyalty, Inc. v. Maritz Holdings Inc.*, 986 F.3d 1367, 1378 (Fed. Cir. 2021); *see also BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350–51 (Fed. Cir. 2016); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257–58 (Fed. Cir. 2014).[1]

The preemptive effect of the asserted claims is also a relevant consideration at *Alice* step two. In a recent case, the Federal Circuit explained the relationship between preemption and the existence of an inventive concept:

> We have explained that claims for methods that "improve[] an existing technological process" include an inventive concept at step two. *BASCOM*, 827 F.3d at 1350–51 (quoting *Alice*, 573 U.S. at 221, 223). And claims that "recite a specific, discrete implementation of the abstract idea" rather than "preempt[ing] all ways of" achieving an abstract idea using a computer may include an inventive concept. *Id.* at 1350. But claims to "an abstract idea implemented on generic computer components, without providing a specific technical solution beyond simply using generic computer concepts in a conventional way" do not pass muster at step two. *Id.* at 1352.

Killian, 45 F.4th at 1382 (cleaned up). Thus, whether the claims recite "a specific, discrete implementation of the abstract idea" rather than preempting all implementations of that idea is an appropriate consideration in the step two inquiry. *See id.*

---

[1] The question whether the claims recite a "technological solution to a technological problem" may also be considered at step one of the *Alice* test. *See, e.g.*, *Packet Intel. LLC v. NetScout Sys., Inc.*, 965 F.3d 1299, 1309 (Fed. Cir. 2020); *Universal Secure Registry*, 10 F.4th at 1352; *CosmoKey Sols. GmbH & Co. KG v. Duo Sec. LLC*, 15 F.4th 1091, 1100 (Fed. Cir. 2021) (Reyna, J., concurring). Other cases, such as *cxLoyalty*, *BASCOM*, and *DDR Holdings*, make clear that the existence of a technological solution to a technological problem is also an appropriate consideration at step two of *Alice*. The dual role of that factor is not anomalous, as the Federal Circuit has recognized that there is some doctrinal overlap between the two steps. *See CareDx, Inc. v. Natera, Inc.*, 40 F.4th 1371, 1379 (Fed. Cir. 2022) (citing *Elec. Power Grp.*, 830 F.3d at 1353).

B. Application

1. *Alice* Step One

The *Alice* step one inquiry considers "what the patent asserts to be the focus of the claimed advance over the prior art." *Yu*, 1 F.4th at 1043 (citation omitted). NetApp argues that the claims are directed to the abstract idea of "restricting access to a storage medium" or "controlling access to a storage medium." Dkt. No. 146 at 4, 12. KOM asserts that the claims are not directed to an abstract idea, but are directed to patent-eligible improvements in computer technology.

As noted above, in cases involving computer technology, the Federal Circuit has frequently framed the inquiry at *Alice* step one as asking "whether the focus of the claims is on the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool." *Enfish*, 822 F.3d at 1335–36; *see also TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1293 (Fed. Cir. 2020); *Uniloc USA, Inc. v. LG Elecs. USA, Inc.*, 957 F.3d 1303, 1306–07 (Fed. Cir. 2020); *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1364–65 (Fed. Cir. 2020); *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1316 (Fed. Cir. 2016); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257–58 (Fed. Cir. 2014).

The Federal Circuit's decision in *Visual Memory* is instructive in this regard. There, the Federal Circuit held that patent claims directed to an improved computer memory system were patent-eligible and not directed to an abstract idea. The memory system disclosed in the patent at issue in that case contained three separate caches, each of which was "programmable based on the type of processor connected to the memory system." 867 F.3d at 1256. The patented system "separat[ed] the functionality for the caches and defin[ed] those functions based on the type of processor" being used with the memory system. *Id.* For that reason, the court held that the claims

were directed to "a technological improvement." The court noted that the concrete nature of the claimed innovation was confirmed by the specification, which "discusse[d] the advantages offered by the technological improvement." *Id.* at 1259–60.

In this case, the specifications of the '864 and '243 patents explain that the inventions are directed to improving various shortcomings in prior art storage devices. For example, the specifications explain that in certain prior art systems, errors may occur when an application attempts to write to a storage device but the device is "unavailable or fails to support write operations." '864 patent, col. 1, ll. 53–54; '243 patent, col. 2, ll. 7–8. In some instances, "[a]n error message may result, but will not be directed to the application since it is not known to the device driver or inaccessible." '864 patent, col. 1, ll. 55–57; '243 patent, col. 2, ll. 8–11. In other instances, "no error message results" when the error occurs, and the data is lost "when the buffer is flushed or when the system is rebooted." '864 patent, col. 1, ll. 58–60; '243 patent, col. 2, ll. 13–15. As the specifications explain, "[n]either of those results is acceptable in normal computer use." '864 patent, col. 1, ll. 60–61; '243 patent, col. 2, ll. 15–16.

To take another example, the specifications explain that many operating systems update certain information relating to a file, such as the "last access date," when that file is accessed. '864 patent, col. 2, ll. 2–4; '243 patent, col. 2, ll. 24–26. That action is referred to by the patents as "journaling." However, when the storage device being accessed is an "archive data store," the specifications explain that "it is often desirable that [the archive data store] not be written to," i.e., "journaling is not performed." '864 patent, col. 2, ll. 11–15; '243 patent, col. 2, ll. 32–36. When accessing an archive data store, the specifications note, prior art systems often altered the data store by performing journaling "even when this [was] not desired." '864 patent, col. 2, ll. 19–20; '243

patent, col. 2, ll. 39–40. The inventors observed that in the prior art there was "no adequate solution to overcome this problem." '864 patent, col. 2, ll. 25–26; '243 patent, col. 2, ll. 45–46.

The patent specifications explain that "an object of the present invention" is to "provide a method of limiting access privileges for a storage medium" in order to "overcome these and other limitations of the prior art." '864 patent, col. 2, ll. 27–30; '243 patent, ll. 47–50. As discussed above, the principal advance disclosed in the asserted patents is to use a "trap layer" to block certain requests from reaching a storage device and to modify other requests before they are sent to the storage device.

i. The '243 Patent Claims

The trap layer is expressly recited in the asserted claims of the '243 patent. For example, the system recited in claim 69 requires, *inter alia*, a "computer processor configured to intercept, by at least one computer file system trap layer . . . an attempted operation on said at least a portion of the computer storage medium." '243 patent, cl. 66 (from which asserted system claim 69 depends). The asserted method claims of the '243 patent are similar, as they require the method step of "intercepting by at least one trap layer an attempted operation on said at least a portion of the storage medium." '243 patent, cl. 1 (from which asserted method claims 4 and 34 depend).

Put simply, the claims of the '243 patent recite the use of a trap layer, which the specification of that patent discloses as the principal means for solving the problems associated with prior art storage devices. Thus, the claims are plainly "directed to an improvement in the functioning of a computer," *Enfish*, 822 F.3d at 1338, and not to an "independently abstract" process that merely invokes computers as a tool, *Elec. Power Grp.*, 830 F.3d at 1354.

In support of its position that the claims of the '243 patent are directed to an abstract idea, NetApp relies on the Federal Circuit's decisions in *Ericsson Inc. v. TCL Communication*

Technology Holdings Ltd., 955 F.3d 1317 (Fed. Cir. 2020), and *Prism Technologies LLC v. T-Mobile USA, Inc.*, 696 F. App'x 1014 (Fed. Cir. 2017), both of which dealt with systems for controlling access to a computer component. Neither case, however, supports NetApp's argument. The asserted claims of the '243 patent are directed to specific mechanisms for performing the recited function (employing a trap layer to intercept an attempted operation and doing so regardless of the identity of a user attempting the operation). The claims at issue in *Prism* and *Ericsson*, by contrast, did not recite the mechanics of an authentication process.

Ericsson involved a system "for controlling access to a platform," consisting of (1) a platform having an interface for providing access to the platform's software services component, (2) an "access controller for controlling access' to the software services component, (3) an interception module for receiving a request for access to the software services component; and a "decision entity" for determining if the request should be granted. After analyzing the language of the asserted claims, the Federal Circuit determined that the four recited computer components "collapse into simply 'an access controller for controlling access' by 'receiving a request' and then 'determining if the request should be granted.'" 955 F.3d at 1326. Neither that function nor either of the remaining limitations altered the court's conclusion that the claims were directed to "the abstract idea of controlling access to resources," using "standard components that are put to use via the 'access controller' limitation." *Id.* The claims were essentially functional in nature, the court ruled, lacking "the specificity required to transform a claim from one claiming only a result to one claiming a way of achieving it." *Id.* at 1328.

Prism similarly claimed a method for controlling access to protected computer resources. The representative asserted claim in *Prism* recited a method consisting of an authentication server (1) receiving identity data from a client computer making a request for resources, (2) authenticating

that identity data, (3) authorizing the requested access and (4) then permitting access to the protected computer resources. That is to say, *Prism* claimed the function of a computer permitting access to resources by any means that determined that the request for resources was permitted. The court unsurprisingly concluded that the asserted claims were directed to the abstract idea of "control[ling] access to protected computer resources by authenticating identity data," *id.* at 1016, in which computers were "invoked merely as a tool." *See Enfish*, 822 F.3d at 1335–36.

A case that presents a useful contrast to *Ericsson* and *Prism* is *TecSec, Inc. v. Adobe, Inc.*, 978 F.3d 1278 (Fed. Cir. 2020). In that case, the Federal Circuit held that claims directed to methods for providing multi-level security in a data network were not directed to an abstract idea. *TecSec*, 978 F.3d at 1296. The court noted that in prior cases involving software innovations, the Federal Circuit asked two questions: whether the focus of the claimed advance was on a solution "to a problem specifically arising in the realm of computer networks or computers," and whether the claim was "properly characterized as identifying a specific improvement in computer capabilities or network functionality, rather than only claiming a desirable result or function." *Id.* at 1293 (cleaned up). The *TecSec* court answered both of those questions in the affirmative with regard to the claims before it.

As the court in *TecSec* explained, the patents at issue in that case described and claimed a method in which a digital object "is assigned a level of security that corresponds to a certain combination of access controls and encryption." *Id.* at 1282. "The encrypted object can then be embedded or 'nested' within a 'container object,' which, if itself encrypted and access-controlled, provides a second layer of security." *Id.* (citation omitted). The invention in *TecSec* provided a software-based mechanism for enhancing the security of information sent over a network, while

providing flexibility to the user, *id.*, and was thus fairly characterized as involving a specific improvement in computer capabilities.

In this case, the asserted claims of the '243 patent satisfy both of the questions identified in *TecSec*. As to the first, it is clear that the claims are directed to "a problem specifically arising in the realm of computer networks or computers," namely, eliminating errors that may occur when attempting to access a storage medium. *See id.* at 1293 (cleaned up). As to the second, the claims are directed to "a 'specific' improvement in computer capabilities or network functionality," namely, the use of a trap layer to intercept file access requests before they are transmitted to a storage medium. *See id.* (citation omitted).

NetApp focuses on the fact that the method claims of the '243 patent use the sort of "result-focused" claim language that is often a marker of claims that are directed to an abstract idea. Dkt. No. 146 at 14. It is true that the method steps are described using functional language (e.g., "associating," "intercepting," "comparing"). *See, e.g.*, '243 patent, cl. 1. However, the use of functional language is but one consideration in the *Alice* step one analysis. Although the use of functional language may render the claims broad in scope, "the breadth of the claims does not necessarily dictate whether the invention is directed to patent-eligible subject matter." *IOENGINE, LLC v. PayPal Holdings, Inc.*, 607 F. Supp. 3d 464, 484 (D. Del. 2022). Instead, "courts must consider 'the focus of the claim, i.e., its character as a whole, in order to determine whether the claim is directed to an abstract idea.'" *Id.* (citation omitted). In this case, the character of the claims of the '243 patent relates to a specific improvement in computer technology, and the claims are therefore not directed to an abstract idea.

ii. The '864 Patent Claims

The claims of the '864 patent present a quite different picture. Claim 5, for example, is a method claim comprising just two steps: (1) "providing an indication of a data write access privilege for the entire logical storage medium, the data write access privilege indicating a disabled operation relating to alteration of a portion of each file stored within the logical storage medium, the indication other than a read only indication"; and (2) "restricting file access to each file within the logical storage medium in accordance with the same indication while allowing access to free space portions of the same logical storage medium." '864 patent, cl. 5. Stripped of their technical jargon, those steps can be restated as follows: (1) providing an indication that one or more file operations is not permitted on a particular storage medium; and (2) restricting access to each file based on that indication, while still allowing access to the free space on that storage medium.

It is immediately apparent that those claims are much broader than the claims of the '243 patent. Rather than limiting the claims to the specific "trap layer" disclosed in the specification, the claims cover essentially any method of restricting access to a storage device based on particular operations that are not permitted to be performed on the device. When claims "broadly recite generic steps and results—as opposed to a specific solution to a technological problem," the claims are more likely to be directed to an abstract idea. *See Universal Secure Registry*, 10 F.4th at 1355. And the asserted claims of the '864 patent simply describe a desired result, not a method of achieving it.

The two questions articulated by the court in *TecSec*, discussed above, provide a useful vehicle for comparing the asserted claims of the '864 patent to the asserted claims of the '243 patent. As with the claims of the '243 patent, the claims of the '864 patent provide a positive answer to the first question—whether the claims focus on "a problem specifically arising in the

realm of computer networks." *See TecSec*, 978 F.3d at 1293 (cleaned up). The second question, however, has a different answer. Unlike the claims of the '243 patent, the claims of the '864 patent are directed to a "desirable result or function," not to a "'specific' improvement in computer capabilities or network functionality." *See id.* at 1293 (citation omitted). Although the specification of the '864 patent describes the same "trap layer" that is recited in the claims of the '243 patent, the detail described in the specification is lacking in the claims. And as the Federal Circuit has made clear, the section 101 analysis focuses on the claims, rather than what is described in the specification. *See PersonalWeb Techs. LLC v. Google LLC*, 8 F.4th 1310, 1315 ("The § 101 inquiry must focus on the language of the Asserted Claims themselves.") (cleaned up); *Ericsson*, 955 F.3d at 1325 ("While the specification may be helpful in illuminating what a claim is directed to . . . the specification must always yield to the claim language when identifying the 'true focus of a claim.") (cleaned up); *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d at 769 (same); *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.2d 1138, 1149 (Fed. Cir. 2016) (same).

Claims 6 and 9 of the '864 patent do not change the analysis above that was directed to claim 5. Claim 6, which depends from claim 5, adds a single limitation specifying the types of indications that may be provided in the first method step. And claim 9, an independent method claim, has steps that are essentially equivalent to those recited in claim 5, except that it recites "write access to data" within the storage medium rather than "file access to each file" within the medium, an inconsequential difference for present purposes. Neither of those claims is sufficiently specific or recites a sufficiently concrete component to render the claims non-abstract.

For the above reasons, I conclude that the asserted claims of the '864 patent are directed to the abstract idea of restricting access to a storage device.

2. *Alice* Step Two

I now turn to the second step of the *Alice* test, which requires the court to determine whether the claims at issue contain an "inventive concept." In a case such as this one, involving computer- and software-based technology, the court looks to whether the relevant implementation consists of more than generic computers and networking components executing "well-understood, routine, [and] conventional activities previously known to the industry." *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). I address *Alice* step two with respect to only the claims of the '864 patent, as I have determined above that the claims of the '243 patent are not directed to an abstract idea.

NetApp argues that the claims of the '864 patent do not contain an inventive concept because they recite "known, generic hardware" that is used to "implement the abstract idea via routine, conventional activity." Dkt. No. 146 at 9. For example, as NetApp points out, the specification admits that the "logical storage medium" and "data write access privilege" limitations of the claims are conventional technology. *See* '864 patent, col. 1, ll. 15–30 (identifying storage devices as including a "CD," "CDR," "magnetic tape," or "removable optical media"); *id.* at col. 8, ll. 49–50 ("[M]any operating systems provide for file and storage medium related access privileges."). And the steps of claim 5, for example, recite generic activities such as "providing an indication" and "restricting file access." *Id.* at cl. 5.

KOM contends that there are "underlying factual disputes" regarding *Alice* step two that must be resolved in KOM's favor on this motion for judgment on the pleadings. Dkt. No. 182 at 17. It is true that patent eligibility can be determined at the pleading stage "only when there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of

law." *Aatrix*, 882 F.3d at 1125. And the question whether a claim recites an inventive concept at *Alice* step two is a question of fact. *Berkheimer*, 881 F.3d at 1368.

The problem for KOM, however, is that it has failed to specifically allege what in the claims of the '864 patent "constitutes the inventive concept or concepts underlying the invention." *GeoComply Sols. Inc. v. Xpoint Servs. LLC*, No. 22-1273, 2023 WL 1927393, at *13 (D. Del. Feb. 10, 2023). To be sure, NetApp bears the burden of proof on its motion. However, when "the defendant contends that the asserted claim lacks a plausible factual basis in the form of an inventive concept, the patent owner is required to respond with more than 'conclusory allegations of inventiveness.'" *Zillow*, 50 F.4th at 1379. In that circumstance, the patent owner must make "plausible and specific factual allegations that aspects of the claims are inventive." *Cellspin Soft, Inc. v. Fitbit, Inc.,* 927 F.3d 1306, 1317 (Fed. Cir. 2019).

KOM's argument that the claims recite an inventive concept relies entirely on the intrinsic record of the '864 patent. KOM argues that, according to the '864 specification, the limitations of the asserted claims "provide improvements over the prior art," and that "[n]othing in the specification or prosecution history indicates that the combination of these limitations was conventional or well understood in the art." Dkt. No. 182 at 18. KOM adds that "NetApp has not pointed to any information in the specification or provided any expert testimony that the claim limitations together were not inventive." *Id.*

Those assertions are entirely conclusory. As such, they fail to show that there is a genuine factual dispute as to whether the asserted claims of the '864 patent contain an inventive concept. What KOM's description does not provide is an articulation of what the alleged inventive concept is or how it is embodied in the claims. It is not sufficient to allege generally that the claims represent an improvement over the prior art. *See Two-Way Media*, 874 F.3d at 1340 ("Eligibility

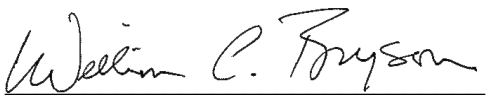
and novelty are separate inquiries."). That is presumably true of all patent claims, and it would eviscerate step two of *Alice* if all that were required is for the patents to state that the claims constitute an improvement over the prior art. Instead, what is required is for the patentee to point to the alleged improvement, consisting of an inventive concept that is embodied in the claims and described and enabled by the specification. KOM has failed to point to an inventive concept that would confer patent eligibility on the asserted claims of the '864 patent at *Alice* step two. The asserted claims of the '864 patent therefore must be dismissed.

IV. Conclusion

In summary, NetApp's motion is DENIED with respect to the asserted claims of the '243 patent because NetApp has failed to show that those claims are directed to an abstract idea. NetApp's motion is GRANTED with respect to the asserted claims of the '864 patent, because NetApp has shown that those claims are directed to patent-ineligible subject matter and are therefore invalid under 35 U.S.C. § 101.[2]

IT IS SO ORDERED.

SIGNED this 4th day of October, 2023.



WILLIAM C. BRYSON
UNITED STATES CIRCUIT JUDGE

[2] In its brief, KOM argues that NetApp's motion should be denied for the additional reason that it represents an untimely summary judgment motion. In KOM's view, NetApp relied on material outside the pleadings when NetApp cited materials from the *inter partes* review proceedings regarding the asserted patents. Because those materials are not necessary to support my decision, I do not rely on them and need not decide whether they can be considered at the pleading stage. Accordingly, this motion can properly be treated as a timely Rule 12(c) motion.