IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

DAEDALUS BLUE, LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	C.A. No. 24-998 (CFC)
	)	
DROPBOX, INC.,	)	
	)	
Defendant.	)	

REPORT AND RECOMMENDATION

Presently before the Court is the motion of Dropbox, Inc. ("Defendant" or "Dropbox") to dismiss the Complaint for failure to state a claim on the grounds that all claims of the patents-in-suit are directed to ineligible subject matter under 35 U.S.C. § 101. (D.I. 15). For the reasons set forth below, the Court recommends that Defendant's motion be GRANTED-IN-PART and DENIED-IN-PART.

I. BACKGROUND

On August 30, 2024, Plaintiff Daedalus Blue, LLC ("Plaintiff" or "Daedalus Blue") filed the present action, alleging that Defendant infringes at least one claim of each of U.S. Patent Nos. 7,542,957 ("the '957 Patent"), 8,176,269 ("the '269 Patent") and 8,131,726 ("the '726 Patent") (collectively, "the Asserted Patents"). (D.I. 1). On November 8, 2024, Defendant moved to dismiss the Complaint pursuant to Federal Rule of Civil Procedure 12(b)(6), arguing that all claims of the Asserted Patents are invalid as claiming ineligible subject matter under 35 U.S.C. § 101. (D.I. 15; *see also* D.I. 16 & 17). Briefing was complete on March 24, 2025. (D.I. 23, 24 & 30).

A. The '957 Patent

The '957 Patent, which is titled "Rich Web Application Input Validation," is generally directed to developing a validation engine with validation rules for Web applications, optionally

containing "a rich set of ordered validation rule primitives ('VRPs')." ('957 Patent at Abstract). There are thirty-one claims in the '957 Patent. According to the Complaint, Defendant has directly infringed and continues to directly infringe at least claim 2 of the '957 Patent. (D.I. 1 ¶ 51).

Claim 2 is an independent claim and it recites:

> 2. A method for validating a request to a Web application, the request having a data comprising:
>
> creating a validation engine in a programmable processor, the validation engine comprising a validation logic, said validation logic comprising a validation rule, said validation rule corresponding to a defined plurality of data elements;
>
> loading said validation rule;
>
> applying said validation rule to said data elements; and
>
> sending said request to the Web application.

('957 Patent at Claim 2). Claims 13-20 ultimately depend from Claim 2. ('957 Patent at Claims 13-20). Claims 13-14 further limit the type of parameters that can be used as data elements. (*Id.* at Claims 13-14). Claims 15-17 specify that a global rejection rule, which can be overridden by a second rule, is the validation rule. (*Id.* at Claims 15-17). Claims 18-19 further limit the identification of the data elements and how they are defined. (*Id.* at Claims 18-19). Claim 20 limits the Web application to being an engine creating Web pages. (*Id.* at Claim 20).

Beyond claim 2, there are three other independent claims in the '957 Patent. Independent claim 1 is directed to a method like claim 2, but with the added limitation that the validation rule must use a plurality of VRPs selected from a group of acceptance VRP, rejection VRP or combination thereof. ('957 Patent at Claim 1). Independent claims 21 and 22 are directed to storage devices containing code to execute the methods recited in claims 1 and 2, respectively. ('957 Patent at Claims 21 & 22). The remaining claims ultimately depend from these independent claims. Claims 3-12 depend from claim 1. Claim 3 specifies that the validation engine must reside in an application firewall. (*Id.* at Claim 3). Claims 4-6 add limitations customizing the VRPs used

in the validation engine. (*Id.* at Claims 4-6). Claims 7-11 add limitations regarding the use of the VRPs. (*Id.* at Claims 7-11). Claim 12 limits the web application to being an engine creating Web pages. (*Id.* at Claim 12). Claims 23-31 add to the storage devices of claims 21 or 22 limitations that correspond to method steps recited in claims 3, 4, 5, 6, 13, 14, 15, 16 and 17, respectively. (*Id.* at Claims 1-6, 13-17 & 21-30).

B. The '726 Patent

The '726 Patent, which is titled "Generic Architecture for Indexing Document Groups in an Inverted Text Index," is generally directed to creating a single content index for duplicate documents while also creating an index of metadata for each document in the duplicate group. ('726 Patent at Abstract). There are twenty-six claims in the '726 Patent. Plaintiff claims that Defendant has directly infringed and continues to directly infringe at least claim 1 of the '726 Patent. (D.I. 1 ¶ 84).

Claim 1 is an independent claim and it recites:

> 1. A method for indexing a plurality of documents, the method comprising the steps of:
>
> a) identifying a duplicate group of documents from among the plurality of documents, each of the documents in the duplicate group comprising respective content and metadata, wherein the respective content of each document in the duplicate group is substantially similar and corresponds to a content for the duplicate group;
>
> b) creating one index of content for the duplicate group;
>
> c) indexing the metadata for each of the documents in the duplicate group;
>
> d) receiving a query and executing said query as if duplicated content was indexed for each document of the duplicate group; and
>
> e) outputting results of said query.

('726 Patent at Claim 1). Claims 2-15 ultimately depend from claim 1. Claims 2-4 add limitations where a master document is identified in each duplicate group and that the method of claim 1 is

performed for multiple duplicate groups. (*Id.* at Claims 2-4). Claims 5-8 add limitations related to creating numerical identifiers for different documents in a given duplicate group. (*Id.* at Claims 5-8). Claims 9-12 add limitations relating to outputting results from each duplicate group with matching content and metadata. (*Id.* at Claims 9-12). Claims 13-15 add that the output comprises a list of data sources from a search engine (claim 13), that the data sources be web pages (claim 14) and that the metadata be a specific type (claim 15).

The other two independent claims track the limitations found in claim 1 but are in the form of an apparatus (claim 16) or program product with computer readable program code (claim 23). ('726 Patent at Claims 16 & 23). Claims 17-22 ultimately depend from claim 16. Claims 17, 18, 19, 21 and 22 contain limitations that track claims 2, 3, 5, 9 and 10, respectively. (*Id* at Claims 1, 2, 3, 5, 9, 10, 16-19, 21 & 22). Claim 20 adds to claim 16 limitations that track those found claims 6 and 8. (*Id.* at Claims 1, 6, 8, 16 & 20). And claims 24-26 ultimately depend from claim 23 with limitations corresponding to claims 2, 9 and 10, respectively. (*Id.* at Claims 1, 2, 9, 10 & 23-26).

C. The '269 Patent

The '269 Patent, which is titled "Managing Metadata for Data Blocks Used in a Deduplication System," is generally directed to a method of retaining metadata in a computer system when the associated files are subjected to a deduplication process. ('269 Patent at Abstract). There are twenty claims in the '269 Patent. Plaintiff asserts that Defendant has directly infringed and continues to directly infringe at least claim 1 of the '269 Patent. (D.I. 1 ¶ 70).

Claim 1 is an independent claim and it recites:

> 1. A method, comprising:
>
> maintaining file metadata for files having data blocks in a computer readable storage device, wherein at least one of the files has file metadata indicating that the file has multiple data blocks;

> maintaining data block metadata for each data block in the computer readable storage device, wherein the data block metadata for one data block includes a data block reference and content identifier identifying content of the data block, wherein the file metadata for each file includes the data block reference to each data block in the file;
>
> determining an unreferenced data block in the computer readable storage device that has become unreferenced;
>
> indicating the data block metadata for the determined unreferenced data block as unreferenced data block metadata; and
>
> adding the data block reference of the unreferenced data block metadata in the computer readable storage device to file metadata for an added file that includes multiple data blocks including one data block having content matching the content of the unreferenced data block according to the content identifier in the unreferenced data block metadata.

('269 Patent at Claim 1). Claims 2-7 ultimately depend from claim 1. Claim 2 and 3 adds steps relating to determining whether to remove the unreferenced data block metadata (claim 2) and employing timestamps in doing so (claim 3). Claim 4 adds steps to receive "a file to add having at least one data block." (*Id.* at Claim 4). Claim 5 and 6 add limitations relating to a second computer readable storage device. (*Id.* at Claims 5 & 6). Claim 7 adds steps to determine whether the unreferenced data block is expected to be included in later added files and managing the metadata accordingly. (*Id.* at Claim 7).

The other two independent claims of the '269 Patent track the limitations found in claim 1 but are in the form of a system (claim 8) or an article of manufacture (claim 14). ('269 Patent at Claims 8 & 14). Claims 9, 10, 11, 12 and 13 ultimately depend from claim 8 and contain system limitations adapted from the methods recited in claims 2, 4, 5, 6 and 7. (*Id.* at Claims 9, 10, 11, 12 & 13; *see also id.* at Claims 2 & 4-7). And claims 15, 16, 17, 18, 19 and 20 ultimately depend from claim 14 and contain article-of-manufacture limitations adapted from the method steps recited in claims 2, 3, 4, 5, 6 and 7. (*Id.* at Claims 15-20, *see also id.* at Claims 2 & 4-7).

II. LEGAL STANDARDS

A. Motion to Dismiss for Failure to State a Claim

In ruling on a motion to dismiss pursuant to Federal Rule of Civil Procedure 12(b)(6), the Court must accept all well-pleaded factual allegations in the complaint as true and view them in the light most favorable to the plaintiff. *See Mayer v. Belichick*, 605 F.3d 223, 229 (3d Cir. 2010); *see also Phillips v. Cnty. of Allegheny*, 515 F.3d 224, 232-33 (3d Cir. 2008). "[A] court need not 'accept as true allegations that contradict matters properly subject to judicial notice or by exhibit,' such as the claims and the patent specification." *Secured Mail Sols. LLC v. Universal Wilde, Inc.*, 873 F.3d 905, 913 (Fed. Cir. 2017) (quoting *Anderson v. Kimberly-Clark Corp.*, 570 F. App'x 927, 931 (Fed. Cir. 2014)). Dismissal under Rule 12(b)(6) is only appropriate if a 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). "[P]atent eligibility may be resolved at the Rule 12 stage only if there are no plausible factual disputes after drawing all reasonable inferences from the intrinsic and Rule 12 record in favor of the non-movant." *Coop. Ent., Inc. v. Kollective Tech., Inc.*, 50 F.4th 127, 130 (Fed. Cir. 2022).

B. Patent-Eligible Subject Matter

Section 101 of the Patent Act provides that anyone who "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. 35 U.S.C. § 101. The Supreme Court has long recognized three exceptions to the broad categories of subject matter eligible for patenting under § 101: laws of nature, physical phenomena and abstract ideas. *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014). These exceptions "are 'the basic tools of scientific and technological work' that lie beyond the domain of patent protection." *Ass'n for Molecular Pathology v. Myriad*

Genetics, Inc., 569 U.S. 576, 589 (2013) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 77-78 (2012)); *see also Alice*, 573 U.S. at 216. A claim to any one of these three categories is directed to ineligible subject matter under § 101. "[W]hether a claim recites patent eligible subject matter is a question of law which may contain underlying facts." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018). Courts follow a two-step "framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice*, 573 U.S. at 217; *see also Mayo*, 566 U.S. at 77-78. First, at step one, the Court determines whether the claims are directed to one of the three patent-ineligible concepts. *Alice*, 573 U.S. at 217. If the claims are not directed to a patent-ineligible concept, "the claims satisfy § 101 and [the Court] need not proceed to the second step." *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361 (Fed. Cir. 2018). If, however, the Court finds that the claims at issue are directed a patent-ineligible concept, the Court must then, at step two, search for an "inventive concept" – *i.e.*, "an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.'" *Alice*, 573 U.S. at 217-18 (alteration in original) (quoting *Mayo*, 566 U.S. at 72-73).

1. Step One of the *Alice* Framework

At step one of *Alice*, the "claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter." *Universal Secure Registry LLC v. Apple Inc.*, 10 F.4th 1342, 1346 (Fed. Cir. 2021); *see also Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (step one looks at the "focus of the claimed advance over the prior art" to determine if the claim's "character as a whole" is to ineligible subject matter). In addressing step one of *Alice*, the Court should be careful not to oversimplify the claims or the claimed invention because, at some level, all inventions are based upon or touch on abstract ideas,

natural phenomena or laws of nature. *Alice*, 573 U.S. at 217; *see also McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016). "At step one, therefore, it is not enough to merely identify a patent-ineligible concept underlying the claim; [courts] must determine whether that patent-ineligible concept is what the claim is 'directed to.'" *Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1050 (Fed. Cir. 2016).

2. Step Two of the *Alice* Framework

At step two of *Alice*, in searching for an inventive concept, the Court looks at the claim elements and their combination to determine if they transform the ineligible concept into something "significantly more." *Alice*, 573 U.S. at 218; *see also McRO*, 837 F.3d at 1312. This second step is satisfied when the claim elements "involve more than performance of 'well understood, routine, [and] conventional activities previously known to the industry.'" *Berkheimer*, 881 F.3d at 1367 (internal quotation marks and citation omitted); *see also Mayo*, 566 U.S. at 73. "The inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art . . . . [A]n inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces." *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016). Whether claim elements or their combination are well-understood, routine or conventional to a person of ordinary skill in the art is a question of fact. *Berkheimer*, 881 F.3d at 1368.

At both steps of the *Alice* framework, courts often find it useful "to compare the claims at issue with claims that have been considered in the now considerably large body of decisions applying § 101." *TMI Sols. LLC v. Bath & Body Works Direct, Inc.*, C.A. No. 17-965-LPS-CJB, 2018 WL 4660370, at * 5 (D. Del. Sept. 28, 2018) (citing *Amdocs (Israel) Ltd v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016)); *see also Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016).

III. DISCUSSION

Defendant argues that all seventy-seven claims of the '957, '726 and '269 Patents are directed to ineligible subject matter under § 101. The Court will address Defendant's arguments as to each Asserted Patent in turn.[1]

A. '957 Patent

1. Step One of the *Alice* Framework

Defendant argues that the claims of the '957 Patent are directed to the abstract idea of "filtering information based on rules." (D.I. 16 at 6). In Defendant's view, the claims recite the filtering of electronic data according to simple rules for deciding whether to accept or reject a Web application request. (*Id.*). Analogizing the claims to throwing away junk mail, Defendant argues that the Web application validation rules of the '957 Patent claims are no different than "mentally applying" a rule that consists of "throw[ing] away mail that looks like a generically addressed advertisement." (*Id.*). According to Defendant, the '957 Patent claims merely provide for "implementing this long-prevalent practice using conventional computing devices." (*Id.*).

Plaintiff argues that the claims of the '957 Patent are not directed to an abstract idea, but to an improvement in computer-based security. (D.I. 23 at 11-13). In particular, Plaintiff argues that the claims are directed to "a novel architecture for developing a validation engine for web applications, which improves security." (*Id.* at 11; *see also id.* ("The claims are directed [to] the technological task of validating attempts to access web applications and maintaining the security of the entire system.")). Plaintiff asserts that the '957 Patent claims recite "specific techniques"

[1] Plaintiff argues that no claim of the Asserted Patents is representative for § 101 purposes and, further, that representativeness is a fact issue precluding dismissal at this stage. (*See, e.g.*, D.I. 23 at 7, 9 & 20). But Defendant does not rely on representativeness in presenting its § 101 arguments. (*See* D.I. 30 at 10 ("Dropbox's motion does not rely on representativeness.")). As such, although skeptical of Plaintiff's unsupported assertion that representativeness is a fact issue, the Court need not decide the issue.

for using validation engines to validate attempts to access Web applications so as to prevent malicious code from accessing the application.[2] (*Id.* at 13). These techniques allegedly solved the problem of validating user input for complex applications without the need for custom code. (*Id.* at 2-3). According to Plaintiff, the validation rules and validation rule primitives used in the claimed invention result in improved "computing performance" of validation processes, as well as validation engines that are "easier to scale and maintain." (*Id.* at 4).

At *Alice* step one, claims directed to an improvement in computer functionality are generally patent-eligible. *See, e.g.*, *Enfish*, 822 F.3d at 1335-36; *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1303-06 (Fed. Cir. 2018). In contrast, claims that aim to improve an abstract idea by merely invoking a computer as a tool are generally not patent-eligible. *See, e.g.*, *PersonalWeb Techs. LLC v. Google LLC*, 8 F.4th 1310, 1315-18 (Fed. Cir. 2021); *Berkheimer*, 881 F.3d at 1366-67; *Intell. Ventures I LLC v. Cap. One Bank (USA)*, 792 F.3d 1363, 1367-68 (Fed. Cir. 2015); *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1364-65 (Fed. Cir. 2020). "In cases involving software innovations, this inquiry often turns on whether the claims focus on specific asserted improvements in computer capabilities or instead on a process or system that qualifies [as] an abstract idea for which computers are invoked merely as a tool." *Uniloc USA, Inc. v. LG Elecs. USA, Inc.*, 957 F.3d 1303, 1306 (Fed. Cir. 2020). The Court ultimately agrees with Defendant that the claims are directed to the abstract idea of filtering information based on rules – not to an improvement in the functioning of technology.

As noted above, it is helpful to compare the claims at issue to claims previously found to be directed toward an abstract idea. *See, e.g.*, *Enfish,* 822 F.3d at 1334 (noting the lack of

[2] Plaintiff fails, however, to identify any such specific technique or limitation in the claim language that captures that technique.

"definitive rule" for determining whether something is an abstract idea and explaining that both the Supreme Court and Federal Circuit "have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases"). In arguing that the '957 Patent claims are directed to the abstract idea of filtering information based on rules, Defendant cites several Federal Circuit cases as analogous. (D.I. 16 at 7). The Court finds particularly instructive *Ericsson Inc. v. TCL Communication Technology Holdings Ltd.*, 955 F.3d 1317 (Fed. Cir. 2020), and *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307 (Fed. Cir. 2016).

In *Ericsson*, the claims were directed to a system for controlling access to a platform (*e.g.*, a mobile device), where the platform included various components, including an access controller, interception module and a combined decision entity / security access manager to determine whether access to the controller should be granted. 955 F.3d at 1325-26. Noting the claims provided for little more than (1) receiving a request and (2) determining if the request should be granted, the Federal Circuit found the claims directed to the abstract idea of "controlling access to, or limiting permission to, resources." *Id.* at 1326. In the court's view, that the claims were drafted in largely functional terms without any indication of how to control such access indicated that the focus of the claims was the abstract idea of controlling access to resources – not to any specific solution unique to a technological problem. *Id.* at 1326-28.

In *Symantec*, the claims were directed to a method of filtering files based on content, with steps for receiving file content identifiers, determining whether the content identifier matches other identifiers and using that determining step to output an indication of the file characteristic. 838 F.3d at 1313. At step one, the Federal Circuit agreed with the district court that the focus of the claims was "receiving e-mail (and other data file) identifiers, characterizing e-mail based on the identifiers, and communicating the characterization – in other words, filtering files/e-mail[s]." *Id.*

Analogizing the filtering of emails based on specific identifiers to discarding paper mail "based on characteristics of the mail" that could be kept in a person's head, the court found that the claims merely invoked generic computers to apply a "well-known idea" to the "particular technological environment of the Internet.'" *Id.* at 1314 (internal quotation marks and citation omitted).

The Court ultimately agrees that the claims of the '957 Patent are similar to those found abstract in *Ericsson* and *Symantec*. Claim 2 of the '957 Patent provides for a method of validating a Web application request comprising the steps of "creating a validation engine" that has "a validation rule" corresponding a plurality of data elements, "loading said validation rule" and "applying said validation rule to said data elements" and "sending said request to the Web application." ('957 Patent at Claim 2). Viewed as a whole, the claim is directed to validating a request to access a Web application when a request to access a Web application is received. Just as in *Ericsson* and *Symantec*, claim 2 recites little more than (1) receiving information (here, a request for a Web application) and (2) acting on that information using a pre-determined rule (here, granting the request to the Web application). And despite Plaintiff's assertion to the contrary (D.I. 23 at 13), the limitations recited in claim 2 are in the form of bare functional language – *e.g.*, creating a validation engine comprised of a validation rule, loading said validation rule, applying said validation rule, etc. These limitations amount to a patent on the result of filtering information, rather than a specific manner of achieving the result – a telltale sign that the claims are directed to an abstract idea. *See, e.g.*, *United Servs. Auto. Ass'n v. PNC Bank N.A.*, 139 F.4th 1332, 1337 (Fed. Cir. 2025) (claim reciting "a system for allowing a customer to deposit a check using a customer's handheld mobile device" directed to abstract idea where "drafted in a result-oriented fashion, without the requisite specificity needed to provide a non-abstract technological solution"); *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017)

(claim directed to abstract idea where claim recites the functional results of "converting," "routing," "controlling," "monitoring" and "accumulating records" but fails to describe "how to achieve these results in a non-abstract way"); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1356 (Fed. Cir. 2016) ("[R]esult-focused, functional . . . claim language has been a frequent feature of claims held ineligible under § 101.").

Plaintiff's reliance on *Ancora Technologies, Inc. v. HTC Am., Inc.*, 908 F.3d 1343 (Fed. Cir. 2018), is misplaced. (*See* D.I. 23 at 12). In *Ancora*, the claims provided for a software license to be "stored in a particular, modifiable, non-volatile portion of the computer's BIOS," which was harder to hack, while the to-be verified software was stored elsewhere in the computer's memory. *Id.* at 1346 & 1348. That is, the claims specifically recited a technological limitation that captured the asserted improvement in technology – *i.e.*, storing the license in a particular part of the computer's memory (the BIOS) that was harder to hack. The Federal Circuit held that, by doing so, the claims addressed "a technological problem with computers: vulnerability of license-authorization software to hacking" and were thus not directed toward an abstract idea. *Id.* at 1349. No such benefit is present (or even alleged) here. As explained above, claim 2 of the '957 Patent recites broad functional language to claim the result of creating a validation engine to send a validation request to a Web application. None of the limitations recite a specific way to achieve the alleged benefit of improving web security or validation-process performance. (*See* D.I. 23 at 11 ("[T]he '957 Patent claims a novel architecture for developing a validation engine for web applications, which improves security.")). Unlike the claims in *Ancora*, claim 2 of the '957 Patent contains no specific limitation(s) that capture the purported improvement in technology. *Ancora* is simply not analogous.

For the reasons set forth above, claim 2 is not directed to an improvement in the functionality of computers, but to the abstract idea of filtering information based on rules.[3] Claims 13-20, which ultimately depend from claim 2, further specify how rules are defined (claims 13, 14, 18 & 19), how the rules operate (claims 15-17) and the environment in which the rules are used (claim 20). In the Court's view, none of the dependent claim limitations offer any distinctive significance over the limitations found in claim 2. And Plaintiff makes no attempt to articulate how any limitation in a dependent claim offers any meaningful difference to bring the claim outside the realm of abstraction. (*See* D.I. 23 at 11-13).

The other independent claims of the '957 Patent – and the claims that depend therefrom – fare no better. Claim 1 of the '957 Patent contains limitations similar to claim 2, except claim 1 provides that the validation logic is comprised of a "rich validation rule," which uses "a plurality of ordered validation rule primitives (VRPs)" that are "selected from a group consisting of an acceptance VRP, a rejection VRP, and a combination thereof." ('957 Patent at Claim 1). Claim 1 further specifies that, when "applying said rich validation rule to the data," the data should be "accepted if at least one of said acceptance VRPs succeeds and all of said rejection VRPs fail." (*Id.*). Plaintiff maintains that these limitations set forth "*how* [the] rules are generated and applied." (D.I. 23 at 13) (emphasis in original). Not so. Providing that data is accepted if "an acceptance VRP succeeds and all . . . rejection VRPs fail" is simply an instruction to accept data if an acceptance rule succeeds. It is not the type of specificity found in *Ancora*, and it is not enough to save claim 1. Claim 1's dependent claims likewise fail at step one. The added limitations recite placing the validation engine in an application firewall (claim 3), customizing and specifying use

[3] As in *Symantec*, the abstract idea of claim 2 is limited to a particular technological environment (Web applications).

cases for the VRPs (claims 4-11) and defining a Web application as "an engine creating Web pages" (claim 12). None of these limitations render the claims directed to anything other than the abstract idea of filtering information based on rules. And Plaintiff makes no real attempt to show otherwise. (*See* D.I. 23 at 11-13 (Plaintiff discussing claims generally but not identifying any specific dependent limitation moving the claim(s) away from abstract idea)).

The remaining independent claims, claims 21 and 22, are materially identical to claims 1 and 2, except that they are styled as "storage device" apparatus claims rather than method claims. (*Compare* '957 Patent at Claims 21 & 22, *with id.* at Claims 1 & 2). And the claims that depend from claims 21 and 22 contain the same limitations found in the dependent claims of claims 1 and 2. (*Id.* at Claims 1 & 21, 2 & 22, 3 & 23, 4 & 24, 5 & 25, 6 & 26, 13 & 27, 14 & 28, 15 & 29, 16 & 30, 17 & 31). Both the Supreme Court and the Federal Circuit have emphasized that "the form of the claims should not trump basic issues of patentability." *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1277 (Fed. Cir. 2012); *see also Alice*, 573 U.S. at 226 (after finding method claims were directed to ineligible subject matter, finding system claims unpatentable where system claims were "no different from the method claims in substance"); *Parker v. Flook*, 437 U.S. 584, 593 (1978) (cautioning against a rigid § 101 interpretation that "would make the determination of patentable subject matter depend simply on the draftsman's art"); *Realtime Data LLC v. Array Networks Inc.*, 556 F. Supp. 3d 424, 433 (D. Del. 2021) ("claims reflect[ing] the same ideas written in different ways" do not affect eligibility under § 101), *aff'd*, No. 2021-2251, 2023 WL 4924814 (Fed. Cir. Aug. 2, 2023). The Court thus finds that the step one analysis for claims 1 and 2 and their respective dependent claims is equally applicable to claims 21 and 22 and their respective dependent claims and, as a result, all claims of the '957 Patent are directed to the abstract idea of filtering information based on rules.

Because all claims of the '957 Patent are directed to the abstract idea of filtering information based on rules, the Court proceeds to *Alice* step two.

2. Step Two of the *Alice* Framework

As to step two, Defendant argues that there is no inventive concept in any of the '957 Patent claims because the specification repeatedly provides that the invention may be practiced using generic computing technology. (D.I. 16 at 9). Defendant argues that the claims amount to nothing more than practicing the abstract idea using "conventional computing component[s]" and that "nowhere does the patent suggest that any [component] is used in an unconventional manner." (*Id.* (citing '957 Patent at 6:20-53 & 12:32-34)). Defendant asserts that each limitation utilizes conventional technology and that their ordered combination amounts "only to [the] performance of the abstract idea of filtering information based on rules." (D.I. 16 at 10). In Defendant's view, none of the dependent claim limitations supply an inventive concept; instead, those limitations merely specify the "forms or operation of particular rules," "how rules are created or selected," where validation occurs in a program and limiting the invention to particular use cases. (*Id.* at 11).

Plaintiff asserts that the claims do contain an inventive concept. (D.I. 23 at 14). Citing to the specification, Plaintiff discusses how prior art systems required "bespoke code" to perform complex validation functions. (*Id.* (citing '957 Patent at 3:25-51)). Plaintiff contends that the claims of the '957 Patent address these problems in the prior art "by reciting a novel validation engine using VRPs that is flexible, easy to implement and provides rich and effective validation." (D.I. 23 at 14 (citing '957 Patent at 4:24-35)).[4]

The Court ultimately agrees with Defendant. The '957 Patent specification (repeatedly) provides that the invention is performed with conventional computer components. (*See, e.g.*, '957

[4] Yet VRPs are not recited in all claims. (*See, e.g.*, '957 Patent at Claims 2 & 22).

Patent at 6:3-8 ("Those skilled in the art will appreciate that the invention may be practiced with many computer system configurations, including personal computers, hand-held devices, multi-processor systems, microprocessor-based or programmable consumer electronics, network PCs, minicomputers, mainframe computers and the like."); *id.* a 6:20-23 ("[A]n exemplary system 100 for implementing the invention may be, for example, one of the general purpose computers."); *id.* at 7:8-20 ("The exemplary system 100 may operate in a networked environment using logical connections to one or more remote computers . . . . Such networking environments are commonplace in offices, enterprise-wide computer networks, Intranets and the Internet."); *id.* at 12:32-34 ("The invention can be implemented in digital electronic circuitry, or in computer hardware, firmware, software, or in combinations thereof.")). And the specification never suggests that any of these conventional components are used unconventionally in the claimed invention. In the Complaint, Plaintiff alleges generally that the claim elements or their ordered combination "were non-routine and unconventional at the time of the invention" and "provided a way (not previously available) to develop flexible and reusable authentication and validation rules to manage access to rich web applications." (D.I. 1 ¶ 17; *see also id.* ¶¶ 18-20 & 25-27).[5] But Plaintiff does not indicate ***how*** that is achieved by any claim limitation(s) – or how any limitation(s) are being used in an unconventional way. Moreover, Plaintiff may not contradict the specification with conclusory allegations. *Yu v. Apple Inc.*, 1 F.4th 1040, 1046 (Fed. Cir. 2021).

Viewing the '957 Patent claim elements individually and as ordered combinations, these amount to nothing more than use of conventional computer technology to perform the abstract idea of filtering information based on rules. The limitations of claim 2 recite "loading" a rule in a

[5] Although the Complaint emphasizes the novelty of the '957 Patent invention (D.I. 1 ¶¶ 17, 18 & 25), "a claim for a new abstract idea is still an abstract idea." *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016).

processor, "applying" the rule and "sending" the request to the Web application – *i.e.*, instructions to implement the abstract idea on a computer. That is insufficient to confer an inventive concept at step two. *See Univ. of Fla. Rsch. Found., Inc. v. Gen. Elec. Co.*, 916 F.3d 1363, 1369 (Fed. Cir. 2019).[6] The added limitations in claim 2's dependent claims are likewise unhelpful as they are still nothing more than instructions to apply the abstract idea to generic computer components. The remaining claims suffer the same fate. As explained above, claim 1 recites limitations that amount to nothing more than an instruction to accept a request if an acceptance rule is satisfied, with its dependent claims specifying where validation occurs in a program (claim 3), what is validated (claim 12) and how VRPs are customized and used (claims 4-11). These limitations (and their ordered combination) are still just rote instructions to apply the abstract idea identified at step one. The remaining independent claims (claims 21 and 22) and their respective dependent claims (claims 23-31) are no different in substance from the method claims already lacking an inventive concept. *See Alice*, 573 U.S. at 226. And perhaps most noteworthy, Plaintiff does not point to a single claim limitation that allegedly provides an inventive concept, nor does Plaintiff plausibly show that the ordered combination of limitations in any particular claim is anything but routine, conventional and well-understood activity. (*See* D.I. 23 at 14-15).

The two cases Plaintiff cites are inapposite. (D.I. 23 at 14-15). In *CosmoKey Solutions GmbH & Co. KG v. Duo Security LLC*, 15 F.4th 1091 (Fed. Cir. 2021), the last four steps recited in the claims were specific steps to authenticate – *e.g.*, "having the authentication device check whether a predetermined time relation exists between the transmission of the user identification

[6] It is well-established that the abstract idea itself cannot provide a sufficient inventive concept at step two. *See, e.g.*, *Simio, LLC v. FlexSim Software Prods., Inc.*, 983 F.3d 1353, 1363-64 (Fed. Cir. 2020); *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1316 (Fed. Cir. 2019); *Trading Techs. Int'l, Inc. v. IBG LLC*, 921 F.3d 1378, 1385 (Fed. Cir. 2019).

and a response from the second communication channel" and "ensuring that the authentication function is normally inactive and is activated by the user only preliminarily for the transaction," *id.* at 1094. And the Federal Circuit specifically found "nothing in the specification or anywhere else in the record" to support the conclusion these steps were well-understood, routine or conventional. *Id.* at 1098. In *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), the claims provided detailed steps for allowing a user of a website to click on a link (*e.g.*, third-party advertisement) and be directed to a hybrid web page that has the "look and feel" of the original website but with the ability to purchase products from the third-party, without actually visiting the third-party's website. *Id.* at 1257-58. The Federal Circuit found that the recited limitations specified "how interactions with the Internet are manipulated to yield a desired result" and that, when "taken together as an ordered combination, the claims recite an invention that is not merely the routine or conventional use of the Internet." *Id.* at 1258-59. Unlike the claims in *CosmoKey* or *DDR Holdings*, the claims of the '957 Patent include no such ***specific*** limitations for how to define and organize the validation rule(s) to achieve the desired result of improved Web application validation, instead only reciting generic steps of "loading" and "applying" the rule. And the specification itself repeatedly explains that generic and conventional technology is all that is needed to implement the claimed invention. Plaintiff offers no meaningful argument to the contrary. There is thus no inventive concept in any of the '957 Patent claims.

In sum, because the claims of the '957 Patent are directed to the abstract idea of filtering information based on rules, and because no claim contains an inventive concept sufficient to bring the claim outside the realm of that abstract idea, all claims of the '957 Patent are directed to ineligible subject matter under § 101. The Court therefore recommends that Defendant's motion to dismiss as to the '957 Patent be granted.

B. '726 Patent

1. Step One of the *Alice* Framework

Defendant argues that the '726 Patent claims are all directed to the abstract idea of "organizing documents using their content and characteristics." (D.I. 16 at 15). In Defendant's view, the inventions claimed in the '726 Patent are analogous to a library card catalog system, where a reader can search for specific copies of a book based on certain characteristics (*e.g.*, hardcover versus paperback) even though the content is the same across all copies. (*Id.*). Although not articulated as such, Defendant seems to be arguing that the focus of the claims is a method of collecting, classifying or otherwise filtering data and thus directed to an abstract idea. *See Braemar Mfg., LLC v. ScottCare Corp.*, 816 F. App'x 465, 470 (Fed. Cir. 2020) ("Claims that 'merely collect, classify, or otherwise filter data' are ineligible for patent under § 101." (citation omitted)).

Plaintiff disputes Defendant's characterization of the abstract nature of the claims and argues that the library analogy is improper. (D.I. 23 at 16). Instead, Plaintiff asserts that the claims are directed to "a novel architecture for a computerized search wherein duplicate documents are indexed a single time based on content" and separate indexes are created to manage metadata separately. (*Id.*). Citing the specification, Plaintiff claims that the '726 Patent's invention allows for searching of documents based on both content and metadata while saving considerable index space.[7] (*Id.*; *see also* '726 Patent at 2:30-36). According to Plaintiff, this is not an abstract idea but "an improvement over [the] prior art." (D.I. 23 at 16).

[7] Plaintiff also alleges that the claimed invention improves runtime performance (D.I. 1 ¶ 45; *see also* D.I. 23 at 16), but the portion of the '726 Patent cited in support states that the invention achieves the other benefits "at negligible costs in terms of runtime performance" ('726 Patent at 2:30-26). In light of this discrepancy, the Court will view the benefits and drawbacks of the invention in accordance with what appears in the '726 Patent specification. *See Yu*, 1 F.4th at 1046 ("[I]n ruling on a 12(b)(6) motion, a court need not accept as true allegations that contradict matters properly subject to judicial notice or by exhibit, such as the claims and the patent specification.").

In arguing against a finding of abstraction for the '726 Patent claims, Plaintiff relies solely on *Enfish*. (*See* D.I. 23 at 16). In *Enfish,* the claims were directed to a method or system of data storage and retrieval for computer memory, where each claim required a self-referential table for storing tabular data and the patents made clear that the invention improved the way prior computer systems stored data. 822 F.3d at 1336-37. As the Federal Circuit noted, the specification taught how the claimed self-referential table functioned differently from conventional databases, and how the invention afforded specific benefits over existing data storage and retrieval, such as "increased flexibility, faster search times, and smaller memory requirements." *Id.* at 1337. Thus, the *Enfish* claims were not directed to an abstract idea, but rather to "a specific type of data structure designed to improve the way a computer stores and retrieves data in memory." *Id.* at 1339; *see also id.* at 1336 ("[T]he plain focus of the claims is on an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity."). Here, however, the claims are very different.

Claim 1 of the '726 Patent recites "identifying a duplicate group of documents," generating "one index of content for the duplicate group" while "indexing the metadata for each document" in the duplicate group, receiving and executing a query "as if duplicated content was indexed for each document of the duplicate group" and outputting the results. ('726 Patent at Claim 1). The limitations in claim 1 are broad, describing in functional terms that document content is indexed once, metadata is indexed separately, and an output is given as if content was also indexed separately. Claim 1 recites no limitations indicating ***how*** any of this is achieved. In contrast, the claims in *Enfish* recited specific steps for how the self-referential table worked – *e.g.*, requiring the table to include "a plurality of logical rows, each said logical row including an object identification number (OID) to identify each said logical row" and "a plurality of logical columns

intersecting said plurality of logical rows to define a plurality of logical cells." *Enfish*, 822 F.3d at 1336. Moreover, the claims in *Enfish* recited a means-plus term that was construed to require a four-step algorithm comprised of detailed steps on how specifically to establish and configure the self-referential table. *Id.*at 1336-37. No such detail is present in claim 1 of the '726 Patent. Instead, all that is provided in claim 1 is generic instructions to index document content once, to index metadata separately and to perform a search query – without any indication of how to do so. Ultimately, when viewed as a whole, the claim is directed to nothing more than the abstract idea of organizing documents using their content and characteristics.

The Court ultimately agrees with Defendant that the '726 Patent claims are more analogous to those found abstract in *Intellectual Ventures I LLC v. Erie Indemnity Co.*, 850 F.3d 1315 (Fed. Cir. 2017). In *Erie*, the Federal Circuit found that the claims at issue were directed to the abstract idea of "creating an index and using that index to search for and retrieve data." *Id.* at 1327. The claims specifically recited a method of creating and searching a database where files were associated with certain "tags," and user searches were converted to a set of tags by the searching system. *Id.* at 1326-27. The claimed system then retrieved records containing the set of "tags" identified by the user search. *Id.* at 1327. The Federal Circuit found that the claims were "not focused on how usage of the XML tags alters the database in a way that leads to an improvement in the technology of computer databases" but focused instead "at a high level on searching a database using an index." *Id.* at 1328. Claim 1 of the '726 Patent exists at a similarly high level. Rather than focusing on how the purportedly novel indexing technique improves the functioning of computer technology, the claim is focused on using conventional indexing to conduct a query where content is indexed once and metadata is indexed separately. As in *Erie*, claim 1 is thus directed to an abstract idea – here, organizing documents using their content and characteristics.

The remaining claims of the '726 Patent fare no better than claim 1. The claims that depend from claim 1 add various limitations relating to a master document and queries based thereon, as well as creating indexes for multiple duplicate groups. ('726 Patent at Claims 2-12). Several dependent claims specify the output of a query (claims 9, 13 & 14) and the type of metadata (claim 15). Plaintiff fails to identify any specific limitation in these dependent claims that captures the purported improvement in technology so as to save the claims from abstraction. (*See* D.I. 23 at 15-17). And any attempt to do so would be unsuccessful. Designating a master document and sequentially ordering the remaining duplicate documents are generic techniques for organizing data. Similarly, narrowing the possible outputs or specifying the type of metadata are still focused on merely organizing data. None of these limitations are the type of specific instructions that saved the claims in *Enfish*. Instead, they simply narrow the application of the claimed abstract idea. The other independent claims recite nearly identical limitations as the method in claim 1 but are styled as an apparatus (claim 16) and a program product (claim 23). And the claims dependent on claims 16 & 13 recite limitations similar to those found in claim 1's dependent claims. (*Id.* at Claims 1, 2, 3, 5, 6, 8-10 & 16-26). Therefore, the remaining claims are all directed to the same abstract idea. *See Alice*, 573 U.S. at 226.

Ultimately, although Plaintiff argues that the invention of the '726 Patent improves the functioning of computers (*e.g.*, saving index space), a technological solution to a technological problem must be captured in the language of the claims to survive at step one. That did not happen here. Because all claims of the '726 Patent are directed to the abstract idea of organizing documents using their content and characteristics, the Court proceeds to *Alice* step two.

2. Step Two of the *Alice* Framework

Defendant argues that identifying and indexing duplicate documents "was conventional at the time of the alleged invention." (D.I. 16 at 16 (citing '726 Patent at 3:36-38 & 4:46-48)).

Moreover, according to Defendant, none of the claim limitations in the '726 Patent – individually or as part of an ordered combination – provides a sufficient inventive concept to save the claims at step two. (D.I. 16 at 16-18). Defendant argues that the specification makes clear that any computer hardware or software necessary to implement the claimed invention is simply well-known and conventional technology. (*Id.* at 16 (citing '726 Patent at 3:31-32 & 7:26-34)). In Defendant's view, the only possible unconventional aspect of the invention – indexing content once while indexing metadata separately – is the abstract idea itself and thus cannot provide the inventive concept. (D.I. 16 at 17).

Relying on the specification, Plaintiff alleges that "it was unconventional to index metadata separately for individual documents." (D.I. 23 at 17 (citing '726 Patent at 1:13-29); *see also* D.I. 1 ¶ 40). Plaintiff maintains that prior art systems either (1) created separate indexes for content and metadata or (2) indexed duplicate documents (content and metadata) a single time, resulting "in a tradeoff between compression or data loss from collapsing multiple documents into a single index." (D.I. 23 at 17 (citing '726 Patent at 1:30-1:67); *see also* D.I. 1 ¶ 41). In Plaintiff's view, that there were several unsuccessful attempts to solve this problem – and that the '726 Patent purportedly does – demonstrates that the claims contain an inventive concept. (*Id.*).[8] Plaintiff argues that Defendant's step two analysis "fails to address the particular improvements to indexing systems described and claimed in the '726 Patent." (*Id.*).

The Court agrees with Defendant. Claim 1 of the '726 Patent recites a method of (1) identifying duplicate documents, (2) indexing content once, (3) indexing metadata separately for each duplicate document, (4) receiving and executing a query "as if duplicated content was indexed

[8] Plaintiff cites nothing to support its argument that solving a problem where others have failed is at all relevant to the § 101 inquiry.

for each document of the duplicate group" and (5) outputting the result of the query. ('726 Patent at Claim 1). As the specification makes clear, identifying duplicate documents was well known in the prior art. (*Id.* at 3:36-38 ("As is conventionally known, one aspect of the search engine application 104 involves identifying duplicate documents within the corpus."); *id.* at 3:40-42 ("As recognized by one of ordinary skill in this field, duplicate documents are ones that have substantially similar content.")). As were search engines generally. (*See, e.g.*, *id.* at 1:17-23 ("The general scheme implemented by most search engines includes annotating each document with a fingerprint during tokenization of each document. This fingerprint is conventionally computed by hashing the document's content."); *see also id.* at 4:46-54 ("As is conventionally known, [in a search engine,] documents are broken down into tokens and an index is created that identifies which tokens are contained in which documents. Content tokens are typically words such as 'dog', 'cat', etc. Meta-data tokens, or meta-tokens, can be any of a variety of information such as document URL, document type, author, creation date, security flags, etc.")). As was the concept of returning search results. (*Id.* at 6:60-61 ("Another characteristic of current search engines is that they typically return just one document . . . .")).

What remains of claim 1 is indexing content once and indexing metadata separately.[9] Although Plaintiff has pled that this was unconventional (*see* D.I. 1 ¶ 40), the allegation is conclusory and insufficient for the Court to plausibly infer that these indexing steps were indeed unconventional. Moreover, as recited in claim 1, the indexing limitations amount to nothing more than functional instructions to organize documents using their content and characteristics, which is the abstract idea found at step one. Application of the abstract idea cannot provide the inventive

[9] It is noteworthy that claim 1 includes no limitation that requires the claimed method be performed on (or using) computer technology.

concept at step two. *See BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1290-91 (Fed. Cir. 2018) ("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."); *see also Sanderling Mgmt. Ltd. v. Snap Inc.*, 65 F.4th 698, 704 (Fed. Cir. 2023) (same); *AI Visualize, Inc. v. Nuance Commc'ns, Inc.*, 97 F.4th 1371, 1379 (Fed. Cir. 2024) ("A claim cannot rest on the patent-ineligible concept alone to transform the invention into something significantly more than that concept.").

Plaintiff does not attempt to distinguish any claims of the '726 Patent at step two. Indeed, Plaintiff fails to identify any claim elements or their ordered combination in any claim that provides a saving inventive concept. (*See* D.I. 23 at 17). Nor could Plaintiff. Claims 2-12, which depend from claim 1, provide more limited embodiments as to how the indexing occurs and for multiple duplicate groups. ('726 Patent at Claims 2-12). These are just narrower applications of the abstract idea. *See BSG*, 899 F.3d at 1291 ("As a matter of law, narrowing or reformulating an abstract idea does not add 'significantly more' to it." (citation omitted)). Claims 13 and 14 narrow the format of outputs. (*Id.* at Claims 13-14). In the Court's view, these dependent claims amount to field of use restrictions, which are generally insufficient to provide an inventive concept. *See Capital One Bank*, 792 F.3d at 1366 ("An abstract idea does not become nonabstract by limiting the invention to a particular field of use or technological environment, such as the Internet."). And dependent claim 15 limits the metadata to be used. (*Id.* at Claim 15). Further limiting the type of permissible metadata does not provide "significantly more" than the abstract idea of organizing documents based on their content and characteristics.

The remaining independent claims, and their dependent claims, also lack the requisite inventive concept. The two other independent claims (claims 16 and 23) are apparatus and

program product claims that simply track the limitations of claim 1 and therefore fall for the same reasons as claim 1. *See Alice*, 573 U.S. at 226. As do the claims dependent on claims 16 and 23 because those claims track claim 1's dependent claims. And where these claims recite computer components, the specification provides that all such components are conventional and used conventionally. (*See* '726 Patent at 7:27-36 ("[T]he present invention may be implemented on a conventional IBM PC or equivalent, multi-nodal system (e.g., LAN) or networking system (e.g., Internet, WWW, wireless web). All programming and data related thereto are stored in computer memory, static or dynamic, and may be retrieved by the user in any of: conventional computer storage, display (i.e., CRT) and/or hardcopy (i.e., printed formats). The programming of the present invention may be implemented by one of skill in the art of search engine programming."); *id.* at 7:23 ("[T]he present invention should not be limited by software/program, computing environment, or specific computing hardware.")). And Plaintiff does not contend otherwise.

Because the claims of the '726 Patent are directed to the abstract idea of organizing documents based on content and characteristics, and neither the claim elements nor their ordered combination provides a sufficient inventive concept, the claims are directed to ineligible subject matter under § 101. The Court therefore recommends that Defendant's motion to dismiss as to the '726 Patent be granted.

C. '269 Patent

1. Step One of the *Alice* Framework

Defendant argues that all claims of the '269 Patent are directed to the abstract idea of "managing records of stray information." (D.I. 16 at 19). Defendant asserts that the '269 Patent specification teaches that maintaining data storage systems to "keep a record of what data they are storing in metadata" was well known. (*Id.* at 18 (citing '269 Patent at 1:10-50)). According to Defendant, the '269 Patent's only purported advancement over the prior art is the ability to perform

future document deduplication operations based on unreferenced metadata that has been retained.[10] (D.I. 16 at 18-19). But in Defendant's view, this is no technological improvement – it is simply the abstract idea of managing stray information. (*Id.* at 20).

Plaintiff asserts that the concept of "stray" information is nowhere in the '269 Patent specification or its claims. (D.I. 23 at 18). In Plaintiff's view, the '269 Patent claims are directed to "specific operations of data storage systems" and, further, that the claims "define new techniques to improve [those systems]." (*Id.*; *see also id.* ("The '269 patent claims are directed to specific technological improvements to deduplication in data storage systems, and are not abstract.")). Plaintiff contends that technological improvements may be found in various limitations of the '269 Patent – *e.g.*, retaining unreferenced data blocks after a file is deleted, revising metadata, etc. (*Id.*).

Plaintiff cites no cases to support its argument that the '269 Patent is directed to an improvement in technology. (D.I. 23 at 17-19). Plaintiff does, however, cite *Enfish* without discussion to dispute Defendant's articulation of the abstract idea. (*Id.* at 18). To the extent that Plaintiff is again attempting to rely on *Enfish* to argue that the '269 Patent claims an improvement in the functioning of technology, the Court is unpersuaded. As discussed in connection with the '726 Patent, *Enfish* involved claims directed to a new type of self-referential table that, although deployed on standard computer hardware, provided benefits such as "increased flexibility, faster search times, and smaller memory requirements" over prior art data storage systems. 822 F.3d at 1337. And those benefits were detailed in the specification. *Id.* The *Enfish* claims were thus directed to "a specific type of data structure designed to improve the way a computer stores and retrieves data in memory" – not an abstract idea. *Id.* at 1339.

[10] Unreferenced metadata is metadata that is associated with a document that has been deleted.

Here, Plaintiff asserts that the '269 Patent claims improve the operation of data storage systems (D.I. 23 at 18), but there is no real indication in the specification of what that improvement is or how it is achieved. Instead, the only benefit alleged – obviating the need to re-upload or re-store duplicate data blocks when new files are added – is the automation of tasks that can be performed by the user. (D.I. 23 at 9; *see also* D.I. 1 ¶¶ 32 & 33). The computer does not inherently run any faster or perform any task better; the computer is merely being used as a tool. Despite Plaintiff's assertion that the invention improves "the performance of reconstituting and reusing those unreferenced [data] blocks" (D.I. 23 at 18), that characterization is wholly divorced from the claims and specification. Instead, when viewed as a whole, all that the claims are directed to is the abstract idea of managing data and associated metadata.[11]

The Court agrees with Defendant that the claims of the '269 Patent are more akin to those found abstract in *PersonalWeb*. (*See* D.I. 16 at 20). Relevant here, certain claims in *PersonalWeb* were directed to using content-based identifiers to grant or deny access to restricted data, with limitations including "receiving . . . a request regarding a particular data item" having "a content-dependent name for the particular data item" that is based on "a function of the data in the particular data item," and "determining whether or not access to the particular data item is unauthorized based on whether the content-dependent name of the particular data item" corresponded to a previously-determined value. 8 F.4th at 1313. Separated into its three basic components, the claimed method required "the use of a content-based identifier" (abstract based on prior cases), "comparing the content-based identifier against other values" (abstract mental process) and "[c]ontrolling access to data items" (abstract data management). *Id.* at 1316-17. Each of the three

[11] Defendant articulates the abstract idea as "managing stray information," but the Court finds the abstract idea of "managing data and associated metadata" to be more appropriate.

steps was essentially a mental process, and stringing the three together amounted to nothing more than a multistep mental process. *Id.* at 1316-18; *see also id.* at 1317 (adding the claimed steps together "amounts merely to the abstract idea of using a content-based identifier to perform an abstract data-management function"). Here, the claims are no better.

Claim 1 of the '269 Patent contains four general steps: (1) maintaining file and data block metadata for filed and data blocks, (2) determining when a data block has become unreferenced, (3) indicating the corresponding metadata as belonging to the unreferenced data block and (4) adding the metadata to a data block if the data block has the same content as the data block the metadata was previously referenced to. (*See* '269 Patent at Claim 1). When viewed as a whole, the focus of the claim is simply storing, maintaining and classifying data – something that has repeatedly been found to be an abstract idea at step one. *See, e.g.*, *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) ("The concept of data collection, recognition, and storage is undisputedly well-known"); *In re TLI Commc'ns LLC Pat. Litig.*, 823 F.3d 607, 611-13 (Fed. Cir. 2016) (claims drawn to storing images based on their classification directed to an abstract idea); *Braemar Mfg*, 816 F. App'x at 470 ("[T]he purported improvement is the abstract idea of classification and filtering of data, not an improvement in the functioning of computer capabilities."); *United Servs. Auto. Ass'n*, 139 F.4th at 1337 ("[C]laims directed to collecting information, analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, and presenting the results of collecting and analyzing information fall within the realm of abstract ideas." (internal quotation marks and citation omitted)). Despite Plaintiff's argument to the contrary, claim 1 of the '269 Patent does "not enable computers to operate more quickly or efficiently, nor do[es it] solve any technological problem." *Customedia*, 951 F.3d at 1365.

The remaining claims suffer the same fate. Claims 2-7 of the '269 Patent, which depend from claim 1, add steps that indicate if the unreferenced metadata is for a removed file (claim 2), timestamp the metadata and indicate as removed metadata having older timestamps (claim 3), receive duplicate documents while preserving individual document metadata (claim 4), manage data using a second storage device (claims 5-6) and determine and indicate if a data block should not be used in subsequent files (claim 7). The Court ultimately agrees with Defendant that these additional limitations are merely "other record-management steps" that fail to bring any claim outside the abstract realm. (D.I. 16 at 20). The remaining independent claims recite limitations identical to those found in claim 1 but styled as a system (claim 8) and an article of manufacture (claim 14). Claims 9-13 and 15-20, which depend from claims 8 & 14, recite limitations that track claim 1's dependent claims. All of these remaining claims are directed to the same abstract idea as claim 1 – *i.e.*, managing data and associated metadata. *See Alice*, 573 U.S. at 226.

Because all claims of the '269 Patent are directed to the abstract idea of managing data and associated metadata, the Court proceeds to *Alice* step two.

2. Step Two of the *Alice* Framework

Defendant argues that no inventive concept exists in any claim of the '269 Patent. (D.I. 16 at 20-21). Relying on the specification, Defendant asserts that any use of computer hardware and software in the claims is conventional. (*Id.* at 20-21 (citing '269 Patent at 2:56-57, 3:10-13 & 7:1-7)). And where the claims include limitations requiring computing functions, those functions are apparently "nothing more than storing data, performing calculations" and comparing the outputs. (*Id.* at 21). Defendant further argues that, because the '269 Patent expressly denies any significance to the ordering of the claim limitations, the ordered combination of limitations cannot provide an inventive concept to save the claims. (*Id.* at 21 (citing '269 Patent at 7:62-8:3)). In Defendant's view, because the '269 Patent claims merely apply the abstract idea using generic

computer components, the claim elements and their ordered combination fail to provide a sufficient inventive concept to save the claims from abstraction. (*Id.* at 20-21).

At step two, Plaintiff argues that the '269 Patent claims are directed to "improvements over data deduplication systems by maintaining additional data structures that allow reuse of data blocks after they have become unreferenced." (D.I. 23 at 19). Although acknowledging that reuse of referenced data blocks was known in the prior art, Plaintiff maintains that it was unconventional to retain and repurpose ***un***referenced data blocks. (*Id.* (citing '269 Patent at 1:23-2:4); *see also* D.I. 1 ¶¶ 30-33 (citing '269 Patent at 1:23-2:4 & 6:3-23)).

At this stage and on this record, the Court ultimately cannot conclude that the claims of the '269 Patent lack a sufficient inventive concept. Rather, a fact issue exists at step two. *See Berkheimer*, 881 F.3d at 1370 ("Whether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination."). Plaintiff insists that it was unconventional to retain unreferenced data blocks for future use in file deduplication and restoration systems. (D.I. 23 at 19). Plaintiff specifically alleges in the Complaint that "it was unconventional to maintain the data blocks that were unneeded while marking them such that they were available to reference at a later time." (D.I. 1 ¶ 31; *see also id.* ¶ 32 (acknowledging reuse of data blocks was known in the prior art but doing so "after they have become unreferenced" was unconventional)). And the '269 Patent specification does not indicate that retaining unreferenced data blocks was well-understood, routine or conventional at the time of invention. Despite Defendant's claim to the contrary (D.I. 30 at 8), the Complaint contains well-pleaded allegations that the retention and reuse of unreferenced data blocks was unconventional and not routine or well-understood (D.I. 1 ¶¶ 31-33). Moreover, this aspect of the invention is in all the claims. Claim 1 of the '269 Patent specifically recites "determining an unreferenced data block . . . has

become unreferenced" and "adding the data block reference of the unreferenced data block metadata . . . to file metadata for an added file." ('269 Patent at Claim 1). And similar limitations are present in the other two independent claims. (*Id.* at Claims 8 & 14). As such, if inventive, this concept is found in all claims of the '269 Patent. Because the Court must accept as true Plaintiff's plausible allegations that maintaining unreferenced data blocks for future use was unconventional, there is a fact issue at step two as whether the '269 Patent claims contain a sufficient inventive concept. *See Cellspin*, 927 F.3d at 1317 ("[P]lausible and specific factual allegations that aspects of the claims are inventive are sufficient. As long as what makes the claims inventive is recited by the claims, the specification need not expressly list all the reasons why this claimed structure is unconventional." (citation omitted)); *see also AI Visualize*, 97 F.4th at 1379 ("[A]t the motion to dismiss stage, patentees who adequately allege their claims contain inventive concepts survive a § 101 eligibility analysis under Rule 12(b)(6)." (internal quotation marks and citation omitted)).

Defendant's reliance on *Intellectual Ventures I LLC v. Capital One Financial Corp.*, 850 F.3d 1332 (Fed. Cir. 2017), is misplaced. There, the Federal Circuit found claims directed to the abstract idea of "collecting, displaying and manipulating data" lacking a sufficient inventive concept where those claims recited "no more than ***routine*** steps of data collection and organization using generic computer components and ***conventional*** computer data processing activities." 850 F.3d at 1340-42 (emphasis added). Here, the claims do more. Instead of "merely describ[ing] the functions of the abstract idea itself, without particularity," *id.* at 1341, the '269 Patent claims recite a specific and allegedly unconventional retention of unreferenced data blocks in a database system.

Because Plaintiff's Complaint includes plausible factual allegations that the claim elements in the '269 Patent claims are unconventional – namely maintaining unreferenced data blocks for future use – there is a fact issue as to whether a sufficient inventive concept exists in the claims.

And because that fact issue precludes dismissal at this stage, the Court recommends Defendant's motion to dismiss as to the '269 Patent be denied.

IV. CONCLUSION

For the foregoing reasons, the Court recommends that Defendant's motion to dismiss (D.I. 15) be GRANTED-IN-PART and DENIED-IN-PART.

This Report and Recommendation is filed pursuant to 28 U.S.C. § 636(b)(1)(B), Federal Rule of Civil Procedure 72(b)(1) and District of Delaware Local Rule 72.1. Any objections to the Report and Recommendation shall be limited to ten (10) pages and filed within fourteen (14) days after being served with a copy of this Report and Recommendation. *See* FED. R. CIV. P. 72(b)(2). Any responses to the objections shall limited to ten (10) pages and filed within fourteen (14) days after the objections. The failure of a party to object to legal conclusions may result in the loss of the right to *de novo* review in the District Court. *See Sincavage v. Barnhart*, 171 F. App'x 924, 925 n.1 (3d Cir. 2006); *Henderson v. Carlson*, 812 F.2d 874, 878-79 (3d Cir. 1987).

The parties are directed to the court's "Standing Order for Objections Filed Under Fed. R. Civ. P. 72," dated March 7, 2022, a copy of which is available on the court's website, https://www.ded.uscourts.gov.

Dated: July 31, 2025

UNITED STATES MAGISTRATE JUDGE