IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

REALTIME ADAPTIVE STREAMING)
LLC,)
Plaintiff,)
)
V.)
)
HAIVISION NETWORK VIDEO INC.,)
)
Defendant.)

Civil Action No. 17-cv-1520-CFC-SRF

REPORT AND RECOMMENDATION

I. **INTRODUCTION**

On October 26, 2017, Realtime Adaptive Streaming LLC ("Realtime") filed a complaint against Haivision Network Video Inc. ("Haivision"), asserting infringement of United States Patent Numbers 8,934,535 ("the '535 patent"), 9,769,477 ("the '477 patent"), 8,929,442 ("the '442 patent"), 9,762,907 ("the '907 patent"), and 7,386,046 ("the '046 patent") (collectively, the "Fallon patents"). (D.I. 1; D.I. 22) Additionally, Realtime asserts infringement of United States Patent Numbers 8,634,462 ("the '462 patent") and 9,578,298 ("the '298 patent") (collectively, the "Non-Fallon patents"). (D.I. 22 at ¶ 161-211) Realtime is the owner by assignment of the patents-in-suit, which relate to the concept of encoding and decoding data, and the digital compression of data. (D.I. 22 at ¶ 7, 38, 69, 100, 131, 162, 190) Pending before the court is the motion to dismiss the Fallon patent claims for failure to state a claim pursuant to Federal Rule of Civil Procedure 12(b)(6) and 35 U.S.C. § 101 and the Non-Fallon patent claims pursuant to Federal Rule of Civil Procedure 12(b)(6). (D.I. 23) For the following reasons, I recommend granting-in-part and denying-in-part Haivision's motion to dismiss.

II. BACKGROUND

A. Procedural History

On February 20, 2018, Haivision filed this pending motion to dismiss for failure to state a claim. (D.I. 23) On April 10, 2018, Realtime filed a motion to transfer pursuant to 28 U.S.C. § 1407 with the United States Judicial Panel on Multidistrict Litigation ("the Panel") to consolidate in the District of Colorado actions it originally brought in Delaware, California, Texas, Massachusetts, and Colorado. (D.I. 32) On August 1, 2018, the Panel denied Realtime's motion due to the need for defendant-by-defendant analysis of individual design elements. (D.I. 33) On October 2, 2018, the court heard oral argument on the pending motion to dismiss.¹ (D.I. 38)

B. Related Cases

There is a related Realtime case currently pending before the court, Realtime Adaptive

Streaming LLC v. Netflix, Inc., et al., C.A. No. 17-1520-CFC-SRF (the "Netflix Litigation").²

In the Netflix Litigation, Realtime asserts claims for infringement of all of the Fallon patents,

except the '442 patent. (C.A. No. 17-1692-CFC-SRF, D.I. 1) There is a pending motion to

¹ At oral argument, the court also heard arguments regarding a similar motion to dismiss in a related case, Realtime Adaptive Streaming LLC v. Netflix, Inc., et al., C.A. No. 17-1692-CFC-SRF (the "Netflix Litigation"). (D.I. 38; *see also* C.A. No. 17-1692-CFC-SRF, D.I. 11) ² Two other related cases were before this court: (1) Realtime Adaptive Streaming LLC v. Brightcove Inc. et al, C.A. No. 17-1519-CFC-SRF (the "Brightcove Litigation"), and (2) Realtime Adaptive Streaming LLC v. Sony Electronics, Inc., C.A. No. 17-1693-CFC-SRF (the "Sony Litigation"). The parties in the Brightcove Litigation filed a joint motion to dismiss on October 29, 2018. (C.A. No. 17-1519-CFC-SRF, D.I. 40) On October 31, 2018, Judge Connolly dismissed plaintiff's claims with prejudice and defendant's claims without prejudice. (C.A. No. 17-1519-CFC-SRF, D.I. 27) On November 5, 2018, Judge Connolly dismissed plaintiff's claims with prejudice and defendant's claims without prejudice. (C.A. No. 17-1693-CFC-SRF, D.I. 27) On November 5, 2018, Judge Connolly dismissed plaintiff's claims with prejudice and defendant's claims without prejudice. (C.A. No. 17-1693-CFC-SRF, D.I. 27) On November 5, 2018, Judge Connolly dismissed plaintiff's claims with prejudice and defendant's claims without prejudice. (C.A. No. 17-1693-CFC-SRF, D.I. 28)

dismiss the complaint for failure to state a claim pursuant to Rule 12(b)(6) and 35 U.S.C. § 101 filed by defendant Netflix.³ (C.A. No. 17-1692-CFC-SRF, D.I. 11)

C. Patents-in-Suit

The '535 patent is titled "Systems and Methods for Video and Audio Data Storage and

Distribution." (D.I. 22 at ¶ 7) Representative claim 15 recites:⁴

15. A method, comprising:

Determining a parameter of at least a portion of a data block;

Selecting one or more asymmetric compressors from among a plurality of compressors based upon the determined parameter or attribute;

Compressing the at least the portion of the data block with the selected one or more asymmetric compressors to provide one or more compressed data blocks; and

Storing at least a portion of the one or more compressed data blocks.

('535 patent, col. 22:1-12) The '046 patent is titled "Bandwidth Sensitive Data Compression and

Decompression." (D.I. 22 at ¶ 131) Representative claim 40 recites:⁵

40. A system comprising:

A data compression system for compressing and decompressing data input;

A plurality of compression routines selectively utilized by the data compression system, wherein a first one of the plurality of compression routines includes a first compression

³ The court analyzed the Fallon patents in a Report and Recommendation in the related Netflix Litigation. (C.A. No. 17-1692-CFC-SRF) At oral argument, Haivision noted that arguments made by Netflix's counsel equally apply to Haivision, but did not indicate that the related matters should be consolidated. (D.I. 38 at 22:1-3) For the purposes of this Report and Recommendation, the court will only address the patents identified in defendant Haivision's motion to dismiss.

⁴ Here, claim 15 of the '535 patent and claim 40 of the '046 patent are the representative claims. (*See* D.I. 24 at 8, 13) In the related Netflix Litigation, the representative claims are: claim 15 of the '535 patent, claim 1 of the '477 patent, claim 1 of the '907 patent, and claim 1 of the '046 patent. (*See* C.A. No. 17-1692-CFC-SRF, D.I. 13 at 8, 11, 13, 14)

⁵ This representative claim differs from that in the related Netflix Litigation, where claim 1 of the '046 patent was, instead, the representative claim for the '046 patent.

algorithm and a second one of the plurality of compression routines includes a second compression algorithm; and

A controller for tracking throughput and generating a control signal to select a compression routine based on the throughput, wherein said tracking throughput comprises tracking a number of pending access requests to a storage device; and

Wherein when the controller determines that the throughput falls below a predetermined throughput threshold, the controller commands the data compression engine to use one of the plurality of compression routines to provide a faster rate of compression so as to increase the throughput.

('046 patent, col. 27:25-28:10)

III. LEGAL STANDARD

A. Federal Pleading Standard under Rule 12(b)(6)

Rule 12(b)(6) permits a party to move to dismiss a complaint for failure to state a claim upon which relief can be granted. Fed. R. Civ. P. 12(b)(6). When considering a Rule 12(b)(6) motion to dismiss, the court must accept as true all factual allegations in the complaint and view them in the light most favorable to the plaintiff. *Umland v. PLANCO Fin. Servs. Inc.*, 542 F.3d 59, 64 (3d Cir. 2008).

To state a claim upon which relief can be granted pursuant to Rule 12(b)(6), a complaint must contain a "short and plain statement of the claim showing that the pleader is entitled to relief." Fed. R. Civ. P. 8(a)(2). Although detailed factual allegations are not required, the complaint must set forth sufficient factual matter, accepted as true, to "state a claim to relief that is plausible on its face." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007); *see also Ashcroft v. Iqbal*, 556 U.S. 662, 663 (2009). A claim is facially plausible when the factual allegations allow the court to draw the reasonable inference that the defendant is liable for the misconduct alleged. *Iqbal*, 556 U.S. at 663; *Twombly*, 550 U.S. at 555-56.

When determining whether dismissal is appropriate, the court must take three steps.⁶ See Santiago v. Warminster Twp., 629 F.3d 121, 130 (3d Cir. 2010). First, the court must identify the elements of the claim. *Iqbal*, 556 U.S. at 675. Second, the court must identify and reject conclusory allegations. *Id.* at 678. Third, the court should assume the veracity of the well-pleaded factual allegations identified under the first prong of the analysis, and determine whether they are sufficiently alleged to state a claim for relief. *Id.*; *see also Malleus v. George*, 641 F.3d 560, 563 (3d Cir. 2011). The third prong presents a context-specific inquiry that "draw[s] on [the court's] experience and common sense." *Iqbal*, 556 U.S. at 663-64; *see also Fowler v. UPMC Shadyside*, 578 F.3d 203, 210 (3d Cir. 2009). As the Supreme Court instructed in *Iqbal*, "where the well-pleaded facts do not permit the court to infer more than the mere possibility of misconduct, the complaint has alleged – but it has not 'show[n]' – 'that the pleader is entitled to relief." *Iqbal*, 556 U.S. at 679 (quoting Fed. R. Civ. P. 8(a)(2)).

B. Patent Eligibility under 35 U.S.C. § 101

Section 101 provides that patentable subject matter extends to four broad categories, including "new and useful process[es], machine[s], manufacture, or composition[s] of matter." 35 U.S.C. § 101; *see also Bilski v. Kappos*, 561 U.S. 593, 601 (2010) ("*Bilski II*"); *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980). The Supreme Court recognizes three exceptions to the statutory subject matter eligibility requirements: "laws of nature, physical phenomena, and abstract ideas." *Bilski II*, 561 U.S. at 601 (internal quotations omitted). In this regard, the Supreme Court has held that "[t]he concepts covered by these exceptions are 'part of the

⁶ Although *Iqbal* describes the analysis as a "two-pronged approach," the Supreme Court observed that it is often necessary to "begin by taking note of the elements a plaintiff must plead to state a claim." 556 U.S. at 675, 679. For this reason, the Third Circuit has adopted a three-pronged approach. *See Santiago v. Warminster Twp.*, 629 F.3d 121, 130 n.7 (3d Cir. 2010); *Malleus v. George*, 641 F.3d 560, 563 (3d Cir. 2011).

storehouse of knowledge of all men . . . free to all men and reserved exclusively to none." *Id.* at 602 (quoting *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)). At issue in the present case is the third category pertaining to abstract ideas, which "embodies the longstanding rule that an idea of itself is not patentable." *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2355 (2014) (internal quotations omitted).

In *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), the Supreme Court articulated 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*, 134 S. Ct. at 2355. In accordance with the first step of the *Alice* test, the court must determine whether the claims at issue are directed to a patentineligible concept, such as an abstract idea. *See id.* If so, the court must turn to the second step, under which the court must identify an "'inventive concept'—*i.e.*, an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Id.* (internal citation omitted). The two steps are "plainly related" and "involve overlapping scrutiny of the content of the claims." *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016).

At step 1, "the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter." *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015); *see also Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) ("The 'abstract idea' step of the inquiry calls upon us to look at the 'focus of the claimed advance over the prior art' to determine if the claim's 'character as a whole' is directed to excluded subject matter."). However, "courts must be careful to avoid oversimplifying the claims by looking at them generally and failing to account

for the specific requirements of the claims." *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016) (internal quotations and citations omitted). "Whether at step one or step two of the *Alice* test, in determining the patentability of a method, a court must look to the claims as an ordered combination, without ignoring the requirements of the individual steps." *Enfish, LLC v. Microsoft*, 822 F.3d 1327, 1338 (Fed. Cir. 2016).

At step 2, the Federal Circuit instructs courts to "look to both the claim as a whole and the individual claim elements to determine whether the claims contain an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself." *McRO*, 837 F.3d at 1312 (internal brackets and quotation marks omitted). Under the step 2 inquiry, the court must consider whether claim elements "simply recite 'well-understood, routine, conventional activit[ies]." *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016) (quoting *Alice*, 134 S. Ct. at 2359) (alteration in original). "Simply appending conventional steps, specified at a high level of generality, [is] not enough to supply an inventive concept." *Alice*, 134 S. Ct. at 2357 (internal quotations omitted).

The Federal Circuit looks to the claims as well as the specification in performing the "inventive concept" inquiry. *See Affinity Labs*, 838 F.3d at 1271 ("[N]either the claim nor the specification reveals any concrete way of employing a customized user interface."). "The inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art." *Bascom*, 827 F.3d at 1350. In *Bascom*, the Federal Circuit held that "the limitations of the claims, taken individually, recite generic computer, network and Internet components, none of which is inventive by itself," but nonetheless determined that the patent

adequately alleged an ordered combination of these limitations to be patent-eligible under step 2 at the pleading stage. *Id.* at 1349.

The "mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention" under step two. *Alice*, 134 S. Ct. at 2358. "Given the ubiquity of computers . . . wholly generic computer implementation is not generally the sort of additional feature that provides any practical assurance that the process is more than a drafting effort designed to monopolize the abstract idea itself." *Id.* (internal quotations and citations omitted). The Federal Circuit has held that certain improvements in computer software are not abstract ideas under *Alice* step one. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016); *see also Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1259 (Fed. Cir. 2017). The relevant question in determining if computer technology is directed to an abstract idea is whether the claims direct to an improvement on computer functionality itself, or an improvement on economic or other tasks for which a computer is merely used as a tool.⁷ *Enfish*, 822 F.3d at 1335-36.

Patent eligibility under § 101 is a question of law suitable for resolution on a motion to dismiss for failure to state a claim under Rule 12(b)(6). *See In re TLI Commc 'ns LLC Patent Litig.*, 823 F.3d 607, 610 (Fed. Cir. 2016) (applying regional circuit law to the *de novo* review of a district court's patent eligibility determination under § 101 on a Rule 12(b)(6) motion to dismiss). However, the Federal Circuit recently emphasized that, "like many legal questions, there can be subsidiary fact questions which must be resolved en route to the ultimate legal

⁷ "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." *Epic IP LLC v. Backblaze, Inc.*, 2018 WL 6201582 (D. Del. Nov. 26, 2018) (citing *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999 (Fed. Cir. 2018)).

determination." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018). "The question of whether a claim element or combination of elements is wellunderstood, routine and conventional to a skilled artisan in the relevant field is a question of fact[]" that goes beyond what was simply known in the prior art. *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018). On a motion to dismiss, this question of fact, like all questions of fact, must be resolved in the plaintiff's favor. *Aatrix Software, Inc.*, 882 F.3d at 1128.

IV. DISCUSSION

A. Alice Step 1

Applying the first step of the *Alice* framework to the asserted claims, the court concludes that the Fallon patents are directed to the abstract idea of encoding and decoding data, and the digital compression of data. As a preliminary matter, the court addresses a few recurring arguments between Haivision and Realtime. First, Haivision claims the representative claims are claim 15 of the '535 patent and claim 40 of the '046 patent. (D.I. 24 at 8, 13) Realtime does not explain why the court should not consider these claims representative. (*See* D.I. 28) Under *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, 776 F.3d 1343 (Fed. Cir. 2014), each claim does not need to be repeatedly attacked individually, so long as "all the claims are substantially similar and linked to the same abstract idea." *Content Extraction*, 776 F.3d at 1348 (internal quotations and citations omitted).

Here, this court recommends finding that that the above listed claims are representative of each of the Fallon patents. Similar to the plaintiff in *Content Extraction*, Realtime has not identified claims that "it believe[s] would not be fairly represented" by these claims in a § 101 analysis. *Id.* Nor has Realtime identified "any other claims as purportedly containing an inventive concept." *Id.* Ultimately, Realtime has failed to "present any meaningful argument for

the distinctive significance of any claim limitations not found in the representative claim[s]." *Berkheimer*, 881 F.3d at 1365 (citing *Elec. Power Grp.*, 830 F.3d at 1352; *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1316 & n.9 (Fed. Cir. 2016)). Therefore, for the purpose of our § 101 analysis, claim 15 of the '535 patent and claim 40 of the '046 patent are representative of the Fallon patents.

Additionally, Realtime contends that claim construction should be completed to "illuminate the eligibility of the patents" prior to any § 101 analysis. (D.I. 28 at 18 & n.22) However, "claim construction is not an inviolable prerequisite to a validity determination under § 101." Content Extraction, 776 F.3d at 1349 (affirming the district court's dismissal of the patent claims as "patent-ineligible under § 101 at the pleading stage"); see also OIP Techs., Inc. v. Amazon.com, Inc., 788 F.3d 1359, 1360-62 (Fed. Cir. 2015) (affirming dismissal on the pleadings); Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709, 717 (Fed. Cir. 2014) (affirming Rule 12(b)(6) dismissal); Modern Telecom Sys. LLC v. Juno Online Servs., Inc., 2015 WL 1240182, at *7 (C.D. Cal. Mar. 17, 2015) ("[A]fter *Alice*, courts have frequently decided patent-eligibility on the pleadings."). Realtime does not identify any claim construction issues that need resolution or any facts in dispute. See Smart Software, Inc. v. PlanningEdge, LLC, 192 F. Supp. 3d 243, 247 (D. Mass. 2016) (deciding § 101 eligibility without claim construction where plaintiff failed to offer any specific claim construction issues that would affect the analysis). Therefore, claim construction is not necessary and determining whether the patents-in-suit are patent eligible under § 101 is appropriate at this stage of the proceedings.

Furthermore, Realtime asserts that Haivision incorrectly states that courts may consider results-based, functional language in determining whether a patent is directed towards an abstract idea under the first step of the *Alice* analysis. (D.I. 28 at 9-10) Realtime cites *Amdocs (Israel)*

Ltd. v. Openet Telecom, Inc., 841 F.3d 1288 (Fed. Cir. 2016), to support its assertion. (*Id.*) However, plaintiff relies on the Federal Circuit's commentary on the dissent's paradigm for identifying an abstract idea. (*Id.*) See Amdocs, 841 F.3d at 1295 ("[T]]he dissent would save the patent's eligibility under § 101 only if the claim at issue itself explicitly states the necessary 'means.'"). Plaintiff misinterprets this commentary as rejecting all "result-based, functional language" arguments. (D.I. 28 at 9-10) Subsequently, the Federal Circuit, in *Two-Way Media Ltd. v. Comcast Cable Commc 'ns, LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017), considered the result-based, functional claim language in determining whether the patent was directed towards an abstract idea. See Two-Way, 874 F.3d at 1337-38 ("Claim 1 recites a method for routing information using result-based functional language ..., but does not sufficiently describe how to achieve these results in a non-abstract way."). The Federal Circuit has also stated that "the essentially result-focused, functional character of claim language has been a frequent feature of claims held ineligible under § 101, especially in the area of using generic computer and network technology to carry out economic transactions." *Elec. Power Grp.*, 830 F.3d at 1356.

Finally, Realtime argues that the court must find the patents-in-suit patent eligible because other courts have so held. (D.I. 28 at 1-2, 8-9). However, these cases were decided by the District Courts for the District of Colorado, Eastern District of Texas, and Central District of California. (*Id.*; D.I. 40, Ex. 1) These decisions are not binding on this court and remain only persuasive authority.

i. The '535 Patent

Realtime contends that the '535 patent marked an improvement in computer functionality because it "overcame limitations and issues relating to 'a compromise between efficient data storage, access speed, and addressable data space." (D.I. 28 at 10-11) (citing '535 patent at col.

6:31-53) However, Realtime has not identified how the '535 patent solved these issues, or how the solution is reflected in the claim language. Instead, Realtime repeatedly concludes that the Fallon patents provide "technical solutions to technical problems," but does not provide any evidence to support this conclusion. (*Id.* at 11-12)

The '535 patent does not improve the functioning of a computer. Claim 15 of the '535 patent is drawn to the abstract idea of: (1) determining a parameter, (2) selecting a method of compression, (3) compressing the data with the chosen algorithm, and (4) storing the data. The claims use a wholly generic computer system to obtain functional results of determining a parameter, selecting a compression algorithm, applying that algorithm, and storing the resulting data, with no technical detail describing how to achieve those results. The claims of the '535 patent "do[] not sufficiently describe how to achieve" the results "in a non-abstract way." *Two-Way*, 874 F.3d at 1337. Similar claims that recite a computer "evaluating and selecting" have been found to be abstract and patent ineligible. *See SmartGene, Inc. v. Advanced Biological Labs., SA*, 555 F. App'x 950, 955 (Fed. Cir. 2014) The Federal Circuit has also found that "the concept of data collection, recognition, and storage is undisputedly well-known." *Content Extraction*, 776 F.3d at 1347.

Haivision asserts that claim 15 of the '535 patent is strikingly similar to the patent at issue in *RecogniCorp*, *LLC v. Nintendo Co., Ltd.*, 855 F.3d 1322 (Fed. Cir. 2017). (D.I. 24 at 14) Realtime argues that the method described in claim 15 of the '535 patent differs from that in *RecogniCorp* because the method cannot be performed verbally, does not claim mathematical formulas, and discusses data "not easily recognizable to humans." (D.I. 28 at 12) (citing '535 patent, col. 2:28-30) These distinctions are not relevant and Realtime fails to focus on the subject matter of the claims as a whole. *See RecogniCorp*, 855 F.3d at 1326. The method

described in the '535 patent resembles that in *RecogniCorp*, which described a method of displaying facial feature images, selecting and manipulating the inputs, deriving an output code, and reproducing the composite image on a second display by performing the sequence in reverse. *Id.* at 1324-25. The Federal Circuit concluded that the patent was directed to the "abstract idea of encoding and decoding image data," and was essentially a process that "started with data, added an algorithm, and ended with a new form of data." *Id.* at 1326-27 (citing *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1350-51 (Fed. Cir. 2014)). Here, claim 15 details a system that applies a compression algorithm based on the data received and then stores the resulting data. The method described here follows the formulaic method of adding an algorithm that changes the data to a new form of data – a method that rendered the claim abstract in *RecogniCorp* and *Digitech*.

Because the '535 patent is directed to an abstract idea, the court must then search for an inventive concept according to *Alice* step two.

ii. The '046 Patent

During oral argument, Realtime urged that the '046 patent "chang[ed] the way that [the computer] uses compression to make that compression a better, more useful, functional aspect of the computer." (D.I. 38 at 35:9-11) Netflix, on the other hand, compared the method described in claim 1 of the '046 patent in the following manner: "[i]f what you are using is too slow, pick something from your toolbox that is faster." (*Id.* at 48:20-21) Claim 40 of the '046 patent is directed to the abstract idea of selecting two compression algorithms, using a tracking throughput, and compressing data using selected algorithms.

The claims here utilize a generic computer system to obtain the functional result of compressing data with a tracking throughput. Although Realtime claims the '046 patent (and all

of the Fallon patents) changed the way computers utilize compression, the claims of the '046 patent fail to sufficiently describe how it does so in a non-abstract way. *See Two-Way*, 874 F.3d at 1337; *3G Licensing, S.A. v. Blackberry Ltd.*, 302 F. Supp. 3d 640, 651-52 (D. Del. 2018).⁸ The Federal Circuit has held that claims directed to the idea of encoding and decoding data are abstract. *See RecogniCorp*, 855 F.3d at 1326 ("Morse code, ordering food at a fast food restaurant via a numbering system, and Paul Revere's 'one by land, two if by sea' signaling system all exemplify encoding at one end and decoding at the other end."). Although claim 40 of the '046 patent describes the process of selecting and applying two compression algorithms is not any less abstract than applying it once.

Similarly, the idea of "selecting" has been found to be abstract and patent ineligible. *See SmartGene*, 555 F. App'x at 955. The idea of "tracking" has also been deemed abstract, and can be performed manually. *See Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Can. (U.S.)*, 687 F.3d 1266, 1275 (Fed. Cir. 2012). The addition of a tracking throughput does not make the claim non-abstract because it adds another abstract idea to the method that can be performed by a human. The Federal Circuit has noted that "[a]dding one abstract idea . . . to another abstract idea . . . does not render the claim non-abstract." *RecogniCorp*, 855 F.3d at 1327.

Therefore, because the asserted claim is directed to the abstract idea of selecting two compression algorithms, using a tracking throughput, and compressing data using selected algorithms, the *Alice* analysis proceeds to step two.

⁸ A timely appeal of this decision to the Federal Circuit was made on April 23, 2018, but the appeal has not yet been decided.

iii. Realtime's Cited Caselaw is Inapposite

Prior to addressing the second step of the *Alice* analysis, the court addresses the general arguments made by Realtime. Realtime relies upon five decisions to generally oppose the motion to dismiss all of the Fallon patents. (*See* D.I. 28 at 3-8)

Realtime argues that Haivision cannot establish that the Fallon patents' claims are directed to an abstract idea under *Alice* step one because the Fallon patents are similar to those in: (1) Finjan, Inc. v. Blue Coat Sys., Inc., 879 F.3d 1299 (Fed. Cir. 2018), (2) Enfish, (3) Visual Memory, (4) Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc., 880 F.3d 1356 (Fed. Cir. 2018), and (5) DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245 (Fed. Cir. 2014). (D.I. 28 at 3-8) However, these cases are inapposite. The Federal Circuit in *Finjan* noted that the patent at issue recited "specific steps . . . that accomplish the desired result" and enabled a "computer security system to do things it could not do before." Finjan, 2018 WL 341882, at *4. The invention in Finjan solved a technological problem in a technological manner by fashioning a new way of conducting virus scans. See id. at *3. The Fallon patents are dissimilar in that they do not enable a computer system to do anything it could not already. To the extent that the Fallon patents change a computer system's capabilities, they allow the system to compress data at a faster rate by "picking the right tool for the job." (D.I. 38 at 8:6) This is insufficient for a claim to be considered non-abstract. See OIP Techs., 788 F.3d at 1363 ("[R]elying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.").

The court in *Enfish* warned that "describing the claims at such a high level of abstraction and untethered from the language of the claims all but ensures that the exceptions to § 101 swallow the rule." *Enfish*, 822 F.3d at 1337. The patent in *Enfish* described a self-referential

table that differed from conventional database structures. *Id.* The Federal Circuit concluded the district court had oversimplified the benefits of the patent at issue to simply "storing, organizing, and retrieving memory in a logical table." *Id.* The claims were an improvement to computer functionality because the self-referential database "did more than allow computers to perform familiar tasks with greater speed and efficiency; it actually permitted users to launch and construct databases in a new way." *Finjan*, 879 F.3d at 1305. Here, the claims do not state a similar claim element that so differs from conventional technology. The Fallon patents generally describe a method of selecting a compression algorithm and then applying it. They do not describe a break from conventional technologies and utilize a generic computer system to implement their invention. The Fallon patents claim to improve the speed at which a computer can perform the task of compressing data. Beyond this, there is no improvement to the computer's functionality.

In *Visual Memory*, the court noted that the patent at issue was not abstract because it was directed to an improvement in computer functionality, not "tasks for which a computer is used in its ordinary capacity." *Visual Memory*, 867 F.3d at 1258 (internal quotations and citations omitted). Here, the Fallon patents are not directed to an improvement in computer functionality. They use generic computer systems as a tool to achieve results incident to their abstract ideas. *See Enfish*, 822 F.3d at 1335-36 ("[T]he first step in the *Alice* inquiry in this case asks 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.").

The patent at issue in *Core Wireless* had "no analog to [its] concepts outside the context of [computers and cell phones]." *Core Wireless*, 880 F.3d at 1360. The claim limitations

"disclose[d] a specific manner of displaying a limited set of information to the user, rather than using conventional user interface methods." *Id.* at 1363. In other words, the *Core Wireless* patents recited a specific improvement to computer functionality. Here, the Fallon patents describe the use of a generic computer system, utilize a method that can be described outside of the technological context, and are not directed to specific improvements in computer functionality.

Realtime also compares the instant case to that in DDR. In DDR, the Federal Circuit noted that the patents at issue were not "as technologically complex as an improved, particularized method of digital data compression." DDR, 773 F.3d at 1259. Realtime concludes that, based on this statement, the Fallon patents are "unquestionably" patent eligible. (D.I. 28 at 8) However, the Federal Circuit decided *DDR* prior to deciding *RecogniCorp*, which explored the patent eligibility of encoding and decoding. Realtime emphasizes the phrase "digital data compression" in the Federal Circuit's opinion, but fails to take the statement in full: "an improved, particularized method of digital data compression." DDR, 773 F.3d at 1259 (emphasis added). Moreover, in DDR, the Federal Circuit noted the distinction between abstract ideas implemented on computers by the use of conventional computer functionality, and solutions that are based on an improvement in the way computers and networks perform. DDR, 773 F.3d at 1256; Epic IP LLC v. Blackblaze, Inc., 2018 WL 6201582, at *3 (D. Del. Nov. 26, 2018) ("Numerous Federal Circuit decisions have drawn the distinction between patent-eligible claims that are directed to a specific improvement in the capabilities of computing devices, as opposed to a process that qualifies as an abstract idea for which computers are invoked merely as a tool.") (internal quotation marks and citations omitted). The Fallon patents do not describe an

"improved, particularized method of digital data compression," but only direct the computer to select and then apply various existing compression algorithms. *See DDR*, 773 F.3d at 1259.

iv. Whether Realtime Should Be Granted Leave to Amend

Realtime argues in a footnote in its brief that if the court grants Haivision's motion to dismiss, the court must do so without prejudice to amending the Second Amended Complaint because "there certainly [are] allegations of fact that, if . . . accepted, would preclude the dismissal." (D.I. 28 at 18 n.21) (quoting *Aatrix Software, Inc.*, 2018 WL 843288, at *3)⁹ Realtime does not provide examples of additions to the Second Amended Complaint that could change the recommended outcome, and the court is not entirely persuaded that Realtime could do so. Therefore, the court recommends denying the request to amend.

B. Alice Step 2

Having determined that the Fallon patents are directed to an abstract idea, the court proceeds to the second step of the *Alice* test to determine whether the patent describes an inventive concept. *Alice*, 134 S. Ct. at 2357. For the implementation of an abstract idea on a computer to be considered patent-eligible, it must describe more than "well-understood, routine, and conventional activities previously known in the industry." *Alice*, 134 S. Ct. at 2359 (internal quotations and brackets omitted) (quoting *Mayo*, 132 S. Ct. at 1294).

Realtime argues that the unconventional facets of the Fallon patents are confirmed by the issuance of the patents themselves because the USPTO would necessarily had to have found them to be novel. (D.I. 28 at 17) Realtime conflates the inquiries under § 101 and § 102. "The 'novelty' of any element or steps in a process, or even of the process itself, is of no relevance in

⁹ Haivision noted that Realtime has not identified any other available facts, but has not otherwise voiced any opposition to Realtime's request. (D.I. at 8 & n.8)

determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter." *Diamond v. Diehr*, 450 U.S. 175, 188-89 (1981). Simply because the USPTO issued the patents does not mean that the Fallon patents are necessarily patent eligible under § 101.

Realtime further asks the court to take judicial notice of the file history of the asserted patents because they are public record. (D.I. 28 at 17 n.20) The court takes judicial notice of the Fallon patents' file histories, but this does not alter the recommended outcome. The court may consider "matters of public record," such as prosecution histories. *See Bruni v. City of Pittsburgh*, 824 F.3d 353, 360 (3d Cir. 2016); *Hockerson-Halberstadt, Inc. v. Avia Group Int'l, Inc.*, 222 F.3d 951, 957 (Fed. Cir. 2000); Fed. R. Evid. 201(b). However, the file history and the examiner's evaluation of novelty is not relevant to our § 101 analysis. *See Kaavo Inc. v. Cognizant Tech. Sols. Corp.*, C.A. No. 14-1192-LPS, 2016 WL 1268308, at *3 (D. Del. Mar. 31, 2016) (concluding that the claim failed to "provide the inventive concepts needed to impart patentability . . . and the prosecution history . . . does not compel a contrary conclusion"). Therefore, although the court takes judicial notice of the prosecution history, this does not alter the recommendation.

i. The '535 Patent

The lack of an inventive concept in claim 15 precludes patent eligibility. "[T]he *claim* – as opposed to something purportedly described in the specification – is missing an inventive concept." *Two-Way*, 874 F.3d at 1338 (emphasis in original) (citing *RecogniCorp*, 855 F.3d at 1327).

Realtime argues that the claims of the Fallon patents contain inventive concepts sufficient for patent eligibility.¹⁰ Realtime contends that the combination of claim elements ("asymmetric compressors, multiple compressors, selecting compressor based throughput of a communications channel") in the patents are unconventional technical solutions that transform their abstract ideas into patentable inventions. (D.I. 28 at 16-18) Realtime asserts that the Fallon patents solve several problems, including data storage and retrieval bandwidth limitations, access delays, data rate limitations, and compression ratios. (*Id.* at 16)

"After identifying an ineligible concept at step one, we ask at step two '[w]hat else is there in the claims before us?" *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018) (quoting *Mayo*, 132 S. Ct. at 1297). Here, the alleged unconventional features of claim 15 of the '535 patent are the asymmetric compressors and the plurality of compressors. (D.I. 28 at 16 n.18) However, the claim elements that apply selected compression algorithms are conventional and generic. The patent states that the invention can be implemented using existing compression algorithms with existing "hardware, software, firmware, special purpose processors, or a combination thereof." ('535 patent, col. 20:1-4) "The fact that many of these technologies were well-known can be discerned from [the] patents themselves. The patents mention that the invention can be performed using many types of hardware ..., suggesting that the hardware used is conventional." *Secured Mail Sols. LLC v. Universal Wilde, Inc.*, 873 F.3d 905, 912 (Fed. Cir. 2017). A computer in a computer implemented invention "must involve more than performance of 'well-understood, routine, [and] conventional activities previously known to the

¹⁰ Similar to Realtime's arguments regarding *Alice* step one, Realtime does not analyze each representative claim under *Alice* step two beyond a footnote identifying "unconventional technical solutions," but provides overarching arguments for the Fallon patents. (*See* D.I. 28 at 16 n.18)

industry'" to be meaningful. *Content Extraction*, 776 F.3d at 1347-48 (citing *Alice*, 134 S. Ct. at 2357).

Claim 15 of the '535 patent is directed towards the abstract idea of selecting between the compressors that are allegedly unconventional. The use of the compressors themselves does not add anything significant, but instead restates part of the abstract idea. The compressors, despite their type or number, do not add an inventive concept to the abstract idea of selecting. *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.") (citing *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018)).

The patent at issue in *RecogniCorp* described a "particular encoding process using the specific algorithm disclosed," but was still deemed insufficient under *Alice* step two. *RecogniCorp*, 855 F.3d at 1327 (internal quotations omitted). Here, the '535 patent does not disclose any particular encoding process or any specific encoding algorithms, but simply states that the method described can choose between encoding algorithms and then apply the chosen algorithm. "[T]he claims at issue amount to 'nothing significantly more' than an instruction to apply the abstract idea . . . using some unspecified, generic computer. Under our precedents, that is not 'enough' to transform an abstract idea into a patent-eligible invention." *Alice*, 134 S. Ct. at 2360 (internal quotations, citations, and emphasis omitted). Therefore, I recommend finding that claim 15 of the '535 patent fails *Alice* step two.

ii. The '046 Patent

Realtime alleges that by using two compression routines and selecting one by use of a throughput, claim 40 of the '046 patent describes an inventive concept sufficient to transform the abstract idea into a patent eligible invention. (D.I. 28 at 16 n.18) Compressing data is an

abstract idea and reciting that data will be compressed using an unspecified, existing compression algorithm does not add an inventive concept to the abstract idea of compression. See RecogniCorp, 855 F.3d at 1327-28. Claim 40 of the '046 patent provides no other details regarding how the method described adds an inventive concept to data compression. There are even fewer details regarding the encoding process and the algorithms involved than those provided in the patent at issue in *RecogniCorp*, which failed the second step of the *Alice* analysis. See id. Although the '046 patent uses a throughput, this usage does not significantly add to the abstract idea of selecting a compression routine with a parameter. This is especially true for the tracking throughput in the '046 patent because tracking is abstract and can be performed manually. See Bancorp Servs., 687 F.3d at 1275. As with the '535 patent, the '046 patent states that it can be implemented "in various forms of hardware, software, firmware, special purpose processors, or a combination thereof." ('046 patent, col. 19:54-56) The court reiterates that this suggests that the invention described in the '046 patent was well-known and lacking in an inventive concept sufficient to transform it to a patent eligible invention. See Secured Mail Sols., 873 F.3d at 912; Content Extraction, 776 F.3d at 1347-48; RecogniCorp, 855 F.3d at 1327-28. Consequently, I recommend finding that the '046 patent fails under step two of Alice.

C. Non-Fallon Patents

"[S]ufficient allegations would include, at a minimum, a brief description of what the patent at issue does, and an allegation that certain named and specifically identified products or product components also do what the patent does." *IP Commc 'n Sols., LLC v. Viber Media (USA) Inc.*, C.A. No. 16-134-GMS, 2017 WL 1312942, at *3 (internal quotations omitted) (quoting *Bender v LG Elecs. U.S.A., Inc.*, 2010 WL 889541, at *2 (N.D. Cal. Mar. 11, 2010)).

Haivision attempts to draw parallels between the case at hand and *Raindance Techs., Inc.* v. 10x Genomics, Inc., C.A. No. 15-152-RGA, 2016 WL 927143 (D. Del. Mar. 4, 2016), and *Modern Telecom Sys., LLC v. TCL Corp.*, C.A. No. 17-583-LPS-CJB, 2017 WL 6524526 (D. Del. Dec. 21, 2017). (D.I. 24 at 19; D.I. 38 at 51:9-52:1) However, both cases are inapposite. This court, in *Raindance*, granted the defendant's motion to dismiss because the plaintiff "ma[d]e no attempt to relate any [of] their factual assertions with any of the asserted claims." *Raindance*, C.A. No. 15-152-RGA, 2016 WL 927143, at *2. Here, Realtime has directly argued the asserted claims are infringed by various aspects and methodologies allegedly utilized by Haivision's products. (*See, e.g.*, D.I. 22 at ¶¶ 170-180) Similarly, this court in *Modern Telecom* granted the defendant's motion to dismiss because plaintiff had failed to illustrate how operating pursuant to a particular standard related to infringement of the patents-in-suit. *Modern Telecom*, C.A. 14-583-LPS-CJB, 2017 WL 6524526, at *3 & n.8. Here, Realtime has conducted a stepby-step analysis to allege that compliance with a standard – namely, the H.264 or H.265 standards – infringes their patents. (*See, e.g.*, D.I. 22 at ¶¶ 170-180)

Ultimately, the court finds Haivision's argument that it was not sufficiently put on notice unpersuasive and recommend denying Haivision's motion to dismiss on these grounds.

i. The '462 Patent

Haivision argues that Realtime's infringement allegations for the '462 patent relies on third-party documentation regarding Haivision's alleged compliance to the High Efficiency Video Coding ("HEVC") standard,¹¹ instead of relying on Haivision's products. (D.I. 24 at 19) Additionally, Haivision asserts that the '462 patent is directed to a process of *encoding*, but encoding algorithms are not specified in the HEVC standard. (*Id.*) (citing D.I. 24, Ex. A at 2-3)

¹¹ The HEVC standard is also known as "H.265." (D.I. 24 at 5; D.I. 22 at ¶ 182)

In response, Realtime contends that this is a factual issue inappropriate for a 12(b)(6) motion, and that the court should take its factual allegation that the HEVC standard is used to both decode and encode as true. (D.I. 28 at 19-20)

In *Fujitsu Ltd. v. Netgear Inc.*, 620 F.3d 1321 (Fed. Cir. 2010), the Federal Circuit decided that courts may "rely on an industry standard in analyzing infringement." *Fujitsu*, 620 F.3d at 1327. The court further held that when "the relevant section of the standard is optional, and standards [sic] compliance alone would not establish that the accused infringer chooses to implement the optional section[,] . . . the patent owner must compare the claims to the accused products or, if appropriate, prove that the accused products implement any relevant optional sections of the standard." (*Id.* at 1327-28)

At this stage, the court must accept as true all factual allegations in the Second Amended Complaint and view them in the light most favorable to the plaintiff. *See Umland*, 542 F.3d at 64. The portion of the Second Amended Complaint that Haivision references states that "even though the coding algorithms . . . are not specified by the HEVC Spec (as stated in clause 0.7), *this particular combination of choices [in the HEVC Specification] produces a valid bitstream that has to be decoded by a conformant decoder*." (D.I. 22 at ¶ 175; *see also* D.I. 38 at 24:20-25:14) (emphasis added) At the pleadings stage, Realtime's allegations are sufficient to withstand dismissal.

"[I]f an accused product operates in accordance with a standard, then comparing the claims to that standard is the same as comparing the claims to the accused product." *Fujitsu*, 620 F.3d at 1327. Here, Realtime has alleged how compliance with the HEVC standard is connected to infringement of claim 1 of the '462 patent. Paragraphs 170 through 180 of the Second Amended Complaint provide clear examples of how adherence to the HEVC standard also

comports with each claim limitation in claim 1 of the '462 patent. (*See e.g.*, D.I. 22 at ¶¶ 170-180; '462 patent, col. 18:20-48) For example, claim 1 of the '462 patent claims, in part, "a method for coding a video signal using hybrid coding." ('462 patent, col. 18:20) The Second Amended Complaint details:

[t]he Accused Instrumentalities performs a method for coding a video signal using hybrid coding. For example, the aim of the coding process is the production of a bitstream, as defined in definition 3.12 of the ITU-T H.265 Series H: Audiovisual and Multimedia Systems, "Infrastructure of audiovisual services – Coding of moving video" High efficiency video coding ("HEVC Spec"): "bitstream: A sequence of bits, in the form of a NAL unit stream or a byte stream, that forms the representation of coded pictures and associated data forming one or more coded video sequences (CVSs)."

(D.I. 22 at ¶ 170) (internal citations omitted) Further examples and explanations connecting the HEVC standard with claim 1 of the '462 patent, complete with computer code, are provided in the paragraphs thereafter. (*Id.* at ¶¶ 171-180) By not only alleging that Haivision's products infringe the '462 patent, but also identifying common elements between the HEVC standard and claim 1 of the '462 patent, Realtime's Second Amended Complaint has adequately alleged direct infringement. *See Stragent, LLC v. BMW of N. Am., LLC*, 2017 WL 2821697, at *5 (E.D. Tex. Mar. 3, 2017) (citing *Fujitsu*, 620 F.3d at 1327; *Audio MPEG, Inc. HIP Inc. v. Società Italiana Per Lo Sviluppo Dell' Elettronica Spa*, 2016 WL 7010947 (E.D. Va. July 1, 2016)).

ii. The '298 Patent

Haivision argues that its motion to dismiss the '298 patent should be granted because Realtime relies heavily on the HEVC standard, but the HEVC standard does not specify the use of SEI messages. (D.I. 24 at 20) (citing D.I. 24, Ex. A at 238, 284) Realtime counters that its Second Amended Complaint alleges that Haivision performs each limitation and how Haivision performs each limitation. (D.I. 28 at 20) Additionally, Realtime contends that this is a factual issue inappropriate for a 12(b)(6) motion and that the court should view the facts alleged in the light most favorable to plaintiff. (*Id.*)

Realtime "must connect either the accused products to the asserted claims, or the [HEVC standard] to the asserted claims." *Stragent*, 2017 WL 2821697, at *5 (internal quotations omitted) (citing *Fujitsu*, 620 F.3d at 1327). Here, Realtime has identified how compliance with the HEVC standard is connected to infringement of claim 1 of the '298 patent. Paragraphs 198 through 203 of the Second Amended Complaint provide clear examples of how adherence to the HEVC standard also comports with each claim limitation in claim 1 of the '298 patent. (*See e.g.*, D.I. 22 at ¶¶ 198-203; '298 patent, col. 5:50-6:2) For example, claim 1 of the '298 patent claims, in part, a method of "receiving the video stream which comprises at least one composite frame containing a pair of stereoscopic digital images (L, R) according to a predetermined frame packing format." ('298 patent, col. 5:52-55) The Second Amended Complaint details:

[t]he Accused Instrumentalities receive the video stream which comprises at least one composite frame (FC), each composite frame containing a pair of stereoscopic digital images (L,R) according to a predetermined frame packing format. For example, the coded bitstream when it contains a stereoscopic video in one of the frame packing arrangements such as side-by-side or top-and-bottom or segmented rectangular frame packing format as defined in the following sections of the ITU-T H.265 Series H: Audiovisual and Multimedia Systems, "Infrastructure of audiovisual services – Coding of moving video" High efficiency video coding ("HEVC Spec"): D.2.16 Frame packing arrangement SEI message syntax, D.3.16 Frame packing arrangement SEI message semantics, D.2.29 Segmented rectangular frame packing arrangement SEI message syntax, D.3.29 Segmented rectangular frame packing arrangement SEI message semantics.

(D.I. 22 at ¶ 198) Further examples and explanations connecting the HEVC standard with claim
1 of the '298 patent, complete with computer code, are provided in the paragraphs thereafter.
(*Id.* at ¶¶ 199-203) By not only alleging that Haivision's products infringe the '298 patent, but
also identifying common elements between the HEVC standard and claim 1 of the '298 patent,

Realtime's Second Amended Complaint has adequately alleged direct infringement. *See Stragent*, 2017 WL 2821697, at *5 (citing *Fujitsu*, 620 F.3d at 1327; *Audio MPEG*, 2016 WL 7010947). Therefore, it is recommended that Haivision's motion to dismiss with respect to the '298 patent should be denied.

V. CONCLUSION

For the foregoing reasons, I recommend the court grant-in-part and deny-in-part the defendants' motion to dismiss. (D.I. 23)

This Report and Recommendation is filed pursuant to 28 U.S.C. § 636(b)(1)(B), Fed. R. Civ. P. 72(b)(1), and D. Del. LR 72.1. The parties may serve and file specific written objections within fourteen (14) days after being served with a copy of this Report and Recommendation. Fed. R. Civ. P. 72(b)(2). The objections and responses to the objections are limited to ten (10) pages each. 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 October 9, 2013, a copy of which is available on the court's website, http://www.ded.uscourts.gov.

Dated: December $\underline{12}$, 2018

UNITED STATES MAGISTRATE JUDGE