

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

Realtime Data LLC,

Plaintiff,

v.

Array Networks Inc., et al.,

Defendants.

Civil Action No. 17-0800-CFC

CONSOLIDATED

Realtime Data LLC,

Plaintiff,

v.

Spectra Logic Corp.,

Defendant.

Civil Action No. 17-0925-CFC

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MEMORANDUM OPINION

August 23, 2021
Wilmington, Delaware



COLM F. CONNOLLY
CHIEF JUDGE

Plaintiff Realtime Data LLC has sued Defendants for infringement of various combinations of seven patents it holds: U.S. Patent Nos. 7,415,530 (the #530 patent), 8,717,203 (the #203 patent), 8,933,825 (the #825 patent), 9,054,728 (the #728 patent), 9,116,908 (the #908 patent), 9,667,751 (the #751 patent), and 10,019,458 (the #458 patent). The asserted patents pertain to systems and methods involving data compression.

Pending before me are motions to dismiss pursuant to Federal Rule of Civil Procedure 12(b)(6) filed by the consolidated Defendants and Spectra Logic. D.I. 78;¹ *Realtime Data LLC v. Spectra Logic Corp.*, No. 17-0925, D.I. 68. Defendants argue that I should dismiss Realtime's complaints because the asserted patents are invalid under 35 U.S.C. § 101 for failing to claim patentable subject matter.

I. BACKGROUND

A. Asserted Patents

The asserted patents all relate to methods and systems for compression and decompression of data. The asserted patents come from three patent families. The #203, #825, and #728 patents share one written description; the #530, #908, and

¹ All citations are to *Realtime Data v. Array Networks, Inc.*, No. 17-800 unless otherwise noted.

#458 patents share another written description; and the #751 has a distinct written description. The #751 patent is titled “Data Feed Acceleration.” The #530, #908, and #458 patents are titled “Systems and Methods for Accelerated Data Storage and Retrieval.” And the #203, #825, and #728 patents are titled “Data Compression Systems and Methods.” Not every patent is asserted against every defendant, but collectively Defendants challenge the validity of all asserted patents.

Claim 1 of the #751 patent recites

[a] method for compressing data comprising:
analyzing content of a data block to identify a parameter,
attribute, or value of the data block that excludes
analyzing based solely on reading a descriptor;
selecting an encoder associated with the identified
parameter, attribute, or value;
compressing data in the data block with the selected
encoder to produce a compressed data block,
wherein the compressing includes utilizing a state
machine; and
storing the compressed data block;
wherein the time of the compressing the data block and
the storing the compressed data block is less than
the time of storing the data block in uncompressed
form.

Claim 1 of the #530 patent recites

[a] system comprising:
a memory device; and
a data accelerator, wherein said data accelerator is
coupled to said memory device, a data stream is
received by said data accelerator in received form,
said data stream includes a first data block and a

second data block, said data stream is compressed by said data accelerator to provide a compressed data stream by compressing said first data block with a first compression technique and said second data block with a second compression technique, said first and second compression techniques are different, said compressed data stream is stored on said memory device, said compression and storage occurs faster than said data stream is able to be stored on said memory device in said received form, a first data descriptor is stored on said memory device indicative of said first compression technique, and said first descriptor is utilized to decompress the portion of said compressed data stream associated with said first data block.

Claim 1 of the #908 patent recites

[a] system comprising:
a memory device; and
a data accelerator configured to compress: (i) a first data block with a first compression technique to provide a first compressed data block; and (ii) a second data block with a second compression technique, different from the first compression technique, to provide a second compressed data block;
wherein the compressed first and second data blocks are stored on the memory device, and the compression and storage occurs faster than the first and second data blocks are able to be stored on the memory device in uncompressed form.

Claim 9 of the #458 patent recites

[a] method for accelerating data storage comprising:
analyzing a first data block to determine a parameter of the first data block;
applying a first encoder associated with the determined parameter of the first data block to create a first

encoded, data block wherein the first encoder utilizes a lossless dictionary compression technique;
analyzing a second data block to determine a parameter of the second data block;
applying a second encoder associated with the determined parameter of the second data block to create a second encoded data block, wherein the second encoder utilizes a lossless compression technique different than the lossless dictionary compression technique; and
storing the first and second encoded data blocks on a memory device, wherein encoding and storage of the first encoded data block occur faster than the first data block is able to be stored on the memory device in unencoded form.

Claim 14 of the #203 patent recites

[a] system for decompressing, one or more compressed data blocks included in one or more data packets using a data decompression engine, the one or more data packets being transmitted in sequence from a source that is internal or external to the data decompression engine, wherein a data packet from among the one or more data packets comprises a header containing control information followed by one or more compressed data blocks of the data packet the system comprising:
a data decompression processor configured to analyze the data packet to identify one or more recognizable data tokens associated with the data packet, the one or more recognizable data identifying a selected encoder used to compress one or more data blocks to provide the one or more compressed data blocks, the encoder being selected based on content of the one or more data blocks on which a compression algorithm was applied;
one or more decompression decoders configured to decompress a compressed data block from among

the one or more compressed data blocks associated with the data packet based on the one or more recognizable data tokens; wherein:
the one or more decompression decoders are further configured to decompress the compressed data block utilizing content dependent data decompression to provide a first decompressed data block when the one or more recognizable data tokens indicate that the data block was encoded utilizing content dependent data compression; and
the one or more decompression decoders are further configured to decompress the compressed data block utilizing content independent data decompression to provide a second decompressed data block when the one or more recognizable data tokens indicate that the data block was encoded utilizing content independent data compression; and
an output interface, coupled to the data decompression engine, configured to output a decompressed data packet including the first or the second decompressed data block.

Claim 18 of the #825 recites

[a] method comprising:
associating at least one encoder to each one of a plurality of parameters or attributes of data;
analyzing data within a data block to determine whether a parameter or attribute of the data within the data block is identified for the data block;
wherein the analyzing of the data within the data block to identify a parameter or attribute of the data excludes analyzing based only on a descriptor that is indicative of the parameter or attribute of the data within the data block;
identifying a first parameter or attribute of the data of the data block;

compressing, if the first parameter or attribute of the data is the same as one of the plurality of parameter or attributes of the data, the data block with the at least one encoder associated with the one of the plurality of parameters or attributes of the data that is the same as the first parameter or attribute of the data to provide a compressed data block; and

compressing, if the first parameter or attribute of the data is not the same as one of the plurality of parameters or attributes of the data, the data block with a default encoder to provide the compressed data block.

Claim 25 of the #728 patent recites

[a] computer implemented method comprising:

analyzing, using a processor, data within a data block to identify one or more parameters or attributes of the data within the data block;

determining, using the processor, whether to output the data block in a received form or in a compressed form; and

outputting, using the processor, the data block in the received form or the compressed form based on the determination,

wherein the outputting the data block in the compressed form comprises determining whether to compress the data block with content dependent data compression based on the one or more parameters or attributes of the data within the data block or to compress the data block with a single data compression encoder; and

wherein the analyzing of the data within the data block to identify the one or more parameters or attributes of the data excludes analyzing based only on a descriptor that is indicative of the one or more parameters or attributes of the data within the data block.

B. Procedural History

This is the third time I am ruling on the subject-matter eligibility of some of these patents. The first time was an oral ruling on motions to dismiss brought by Aryaka, Panzura, Fortinet, and Reduxio. I found the #728, #908, #530, and #751 patents invalid under § 101. *Reduxio*, No. 17-1676, D.I. 46 (oral order). These four patents were the only patents before me at that hearing. Realtime appealed, and the Federal Circuit vacated my prior ruling as insufficient. *Realtime Data LLC v. Reduxio Sys., Inc.*, 831 F. App'x 492, 499 (Fed. Cir. 2020). The Federal Circuit cautioned that “[n]othing in [its] opinion should be read as opining on the relative merits of the parties’ arguments or the proper resolution of the case.” *Id.*

I subsequently issued a written opinion finding all the asserted patents invalid for claiming ineligible subject-matter.² D.I. 41. I found the #825 and #728 patents directed to the abstract idea of compressing data based on the content of that data. D.I. 41 at 20, 27. I found the #908 and #530 patents directed to the combination of the abstract idea of compressing two different data blocks with different methods and the logical condition that compression and storage together are faster than storage of the uncompressed data alone. D.I. 41 at 30. I found that combination to itself be an abstract idea. D.I. 41 at 30. I found that the #458

² I also found U.S. Patent No 8,717,204 (the #204 patent) invalid, but it is no longer asserted in Realtime’s amended complaints.

patent is directed to the abstract idea of compressing data using two distinct lossless compression algorithms such that the time to compress and store the first data block is less than the time to store the uncompressed data block. D.I. 41 at 34. I found the #751 patent directed to the abstract idea of compressing data with a state machine under conditions where compressing and storing the data is faster than storing the uncompressed data and where the compression method applied to the data is based on the content of the data. D.I. 41 at 36. And lastly, I found the #203 patent directed to the abstract idea of compressing or decompressing data based on the characteristics of that data where a token is used to signify the compression method used. D.I. 41 at 40.

I gave Realtime the opportunity to file amended complaints, and it did. Defendants have renewed their motion to dismiss. The case against Spectra Logic has not been consolidated with the other case, and so Spectra Logic moves for dismissal separately but joins the other Defendants in briefing. *See* No. 17-925, D.I. 65; No. 17-925, D.I. 68; No. 17-925, D.I. 69; No. 17-925, D.I. 71.

II. LEGAL STANDARDS

A. Legal Standards for Stating a Claim

To state a claim on which relief can be granted, 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). Detailed factual allegations are not required, but the

complaint must include more than mere “labels and conclusions” or “a formulaic recitation of the elements of a cause of action.” *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007) (citation omitted). The complaint must set forth enough facts, accepted as true, to “state a claim to relief that is plausible on its face.” *Id.* at 570. A claim is facially plausible “when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (citation omitted). Deciding whether a claim is plausible is a “context-specific task that requires the reviewing court to draw on its judicial experience and common sense.” *Id.* at 679 (citation omitted).

When assessing the merits of a Rule 12(b)(6) motion to dismiss, a court must accept as true all factual allegations in the complaint and in documents explicitly relied upon in the complaint, and it must view those facts in the light most favorable to the plaintiff. *See Umland v. Planco Fin. Servs.*, 542 F.3d 59, 64 (3d Cir. 2008).

B. Legal Standards for Patent-Eligible Subject Matter

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

thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101.

There are three judicially created limitations on the literal words of § 101. The Supreme Court has long held that laws of nature, natural phenomena, and abstract ideas are not patentable subject matter. *Alice Corp. Pty. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014). These exceptions to patentable subject matter arise from the concern that the monopolization of “these basic tools of scientific and technological work” “might tend to impede innovation more than it would tend to promote it.” *Id.* (internal quotation marks and citations omitted). Abstract ideas include mathematical formulas and calculations. *Gottschalk v. Benson*, 409 U.S. 63, 71–72 (1972).

“[A]n invention is not rendered ineligible for patent [protection] simply because it involves an abstract concept[.]” *Alice*, 573 U.S.. at 217.

“[A]pplication[s] of such concepts to a new and useful end . . . remain eligible for patent protection.” *Id.* (internal quotation marks and citations omitted). But in order “to transform an unpatentable law of nature [or abstract idea] into a patent-eligible application of such law [or abstract idea], one must do more than simply state the law of nature [or abstract idea] while adding the words ‘apply it.’” *Mayo Collaborative Servs. v. Prometheus Lab’ys, Inc.*, 566 U.S. 66, 71 (2012) (emphasis omitted).

In *Alice*, the Supreme Court established a two-step framework by which courts are to distinguish patents that claim eligible subject matter under § 101 from patents that do not claim eligible subject matter under § 101. The court must first determine whether the patent’s claims are drawn to a patent-ineligible concept—i.e., are the claims directed to a law of nature, natural phenomenon, or abstract idea? *Alice*, 573 U.S. at 217. If the answer to this question is no, then the patent is not invalid for teaching ineligible subject matter. If the answer to this question is yes, then the court must proceed to step two, where it considers “the elements of each claim both individually and as an ordered combination” to determine if there is an “inventive concept—i.e., an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.” *Id.* at 217–18 (alteration in original) (internal quotations and citations omitted).³

³ The Court in *Alice* literally said that this two-step framework is “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” 573 U.S. at 217. But as a matter of logic, I do not see how the first step of the *Alice/Mayo* framework can distinguish (or even help to distinguish) patents in terms of these two categories (i.e., the categories of (1) “patents that claim laws of nature, natural phenomena, and abstract ideas” and (2) patents “that claim patent-eligible applications of [laws of nature, natural phenomena, and abstract ideas]”). Both categories by definition claim laws of nature, natural phenomena, and abstract ideas; and only one of *Alice*’s steps (i.e., the second, “inventive concept” step) could distinguish the two categories. I therefore understand *Alice*’s two-step framework to be the framework by which courts are to distinguish patents that

Issued patents are presumed to be valid, but this presumption is rebuttable. *Microsoft Corp. v. i4i Ltd. Partnership*, 564 U.S. 91, 96 (2011). Subject-matter eligibility is a matter of law, but underlying facts must be shown by clear and convincing evidence. *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

III. DISCUSSION

I previously considered whether the asserted patents were invalid under § 101 and found them subject-matter ineligible. D.I. 41 at 11–53. In summary, I found at step one that each of the patents are directed to related abstract ideas involving the compression of data. Data compression is an example of abstract information processing. *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“A process that start[s] with data, add[s] an algorithm, and end[s] with a new form of data [is] directed to an abstract idea.”). In order to be patentable claims must do more than simply process data. *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016) (explaining claims that “analyz[e] information . . . by mathematical algorithms, without more” are directed to abstract ideas). The asserted claims lack this something more. This is a case where “although written in technical jargon, a close analysis of the claims

claim eligible subject matter under § 101 from patents that do not claim eligible subject matter under § 101.

reveals that they require nothing more than . . . abstract idea[s]” for the algorithmic processing of information. *Ericsson Inc. v. TCL Commc’n Tech. Holdings Ltd.*, 955 F.3d 1317, 1326 (Fed. Cir. 2020), *cert. denied sub nom. Ericsson Inc. v. TCL Commc’n*, 209 L. Ed. 2d 752 (May 17, 2021).

At step two, I found that the patents do not contain any inventive step other than the abstract ideas to which the patents are directed. The patents’ written description makes clear that the only inventions are the ineligible abstract ideas. *See* #530 patent at 4:47–61, 5:20–24, 11:5–10, 40–46, 14: 19–23 (describing how the invention can be implanted on generic technology using any compression technique “currently well known within the art”), #203 patent at 6:24–41, 7:7–11, 9:24–26, 12:50–54, 14:66–15:3, 16:30–37 (same), #751 patent at 6:20–27, 7:17–25 (incorporating the parents of the #530 and #203 patents by reference). The patents simply apply the claimed abstract ideas on generic hardware in a straightforward manner. This does not constitute an inventive step sufficient for subject-matter eligibility. *Alice*, 573 U.S. 208 at 223–24 (explaining an abstract idea is not patent eligible when simply applied on generic computer hardware).

In considering the renewed motions to dismiss, I will first examine whether there are any material differences in Realtime’s complaints. Then, I consider whether Realtime has presented new legal arguments that require me to reconsider my original analysis.

A. New Pleadings

I first consider whether any of the new pleadings in Realtime’s amended complaints requires me to change my prior analysis. Realtime argues that it has introduced new factual pleadings relevant to § 101 that preclude dismissal, because its “amended complaints contain numerous detailed factual allegations demonstrating the inventiveness of each of the patents” D.I. 91 at 34. The new paragraphs in the complaints assert that certain claims are not representative, offer proposed claim constructions, repeat numerous quotations from the patents’ written descriptions, summarize the results of other proceedings involving the asserted patents, assert that the claims cannot be performed by hand, offer conclusory statements, and contain legal argumentation. *See, e.g.*, D.I. 53 ¶¶ 10–15, 20–32. None of these changes impact the § 101 inquiry for the following reasons.

1. Representative Claims

In my previous opinion, I explained my decision to adopt certain claims as representative and to treat each patents’ claims as equivalent for the purpose of § 101 eligibility. D.I. 41 at 15–18, 26–27, 29–30, 32–34, 36, 39–40. In short, the claims of each patent can be considered together for the purposes of the *Alice* test, because the independent claims reflect the same ideas written in different ways and because the dependent claims do not add limitations that affect eligibility under §

101. *See Content Extraction & Transmission LLC v. Wells Fargo Bank*, 776 F.3d 1343, 1348 (Fed. Cir. 2014).

Subsequently, Realtime amended its complaints to emphasize the fact that the claims do not have identical limitations. *See, e.g.*, D.I. 43 ¶ 26 (“Claim 1 is not representative of all claims of the [#]728 patent. For example, claim 24 claims the use of a “default” compression encoder.”), ¶ 28 (“The dependent claims contain limitations not found in the independent claims.”). Realtime also argues that Defendants have failed to uniquely explain the lack of subject-matter eligibility for all 211 asserted claims. D.I. 92 at 35.

Realtime’s new pleadings do not change my prior analysis. Realtime simply provides quotations from the asserted claims and provides conclusory assertions that these limitations must be considered separately for the purposes of § 101. But Realtime does not explain why these limitations are relevant to subject-matter eligibility, and I have already concluded otherwise. Since Realtime provides neither affirmative argument nor new factual pleadings relevant to representativeness, there is no need to revisit my prior analysis.

2. Claim Construction

Realtime asserts that its proposed claim constructions preclude a decision on subject-matter eligibility at this time because the proposed constructions would, if adopted, confirm that the patents are directed to technological solutions. D.I.

91 at 36. But I already considered five of the six suggested claim constructions in my prior opinion. *See* D.I. 41 at 50–51 (discussing the “compressing” terms, “descriptor,” “data stream,” “data block,” and “analyze”). The same constructions were proposed as part of the complaint against Kaminario that was before me at the time. *See Realtime Data, LLC v. Kaminario*, No. 19-cv-350, D.I. 18 ¶ 9 (D. Del. Aug. 16, 2019). I concluded that the proposed claim constructions did not require postponing a decision on § 101 eligibility, because the constructions did not change the *Alice* inquiry. D.I. 41 at 51. I also noted that the proposed constructions only “confirm that the claims are directed to data analysis.” D.I. 41 at 50–51.

The only new proposal is to construe “data accelerator” as “hardware or software with one or more compression encoders” in the #530 and #908 patents. *See, e.g.*, D.I. 43 ¶ 48. Not only does this broad construction not impact the § 101 analysis, it also effectively concedes that a “data accelerator” does not require any components beyond a generic processor that can run software. Once again, I conclude that the proposed claim constructions do not impact the *Alice* test, and, accordingly, I simply choose to adopt Realtime’s proposed constructions for the purposes of these motions to dismiss.

3. Additional Citations to the Patents

Realtime quotes extensively from the asserted patents in its amended complaints. *See, e.g.*, D.I. 43 ¶¶ 20–24, 28. Adding quotations from the asserted patents’ written descriptions does not create a factual dispute (or otherwise alter my analysis), because the patents were already in the record before me. To the extent that the pleadings interpret the text of the patents, I am free to look directly to the patents. *Secured Mail Sols. LLC v. Universal Wilde, Inc.*, 873 F.3d 905, 913 (Fed. Cir. 2017) (“In ruling on a 12(b)(6) motion, a court need not accept as true allegations that contradict matters properly subject to judicial notice or by exhibit, such as the claims and the patent specification.” (internal quotation marks omitted)). I previously considered the written descriptions in my earlier ruling. These amendments to the complaints are immaterial.

Realtime also argues that the file histories for the patents show that the claimed inventions were not well-understood, routine, and conventional, because the U.S. Patent and Trademark Office “considered hundreds of references.” *See, e.g.*, D.I. 43 ¶¶ 25, 60, 95. But the Patent and Trademark Office has always reviewed prior art in the course of issuing a patent before a district court rules on the patent’s § 101 eligibility. The number of references the Patent and Trademark Office examined is of no consequence.

4. Non-Binding Rulings from Other Districts

Realtime has included in its complaints the outcomes of other cases involving the same patents. *See, e.g.*, D.I. 43 ¶¶ 10–13. Realtime previously presented these same arguments in briefing and in its First Amended Complaint against Kaminario. No. 19-cv-350, D.I. 18 ¶¶ 10–14; D.I. 33 at 36–37. In my prior opinion, I considered these non-binding rulings. D.I. 41 at 45 n.4. I conducted an independent analysis and reached a different conclusion.

5. Statements in Unrelated Patents

Realtime has pled that patents filed in 2012 and 2013 by Altera and Western Digital “admitted that there was still a technical problem associated with computer capacity and a need for a more efficient compression system.” D.I. 43 ¶¶ 29–31. I previously considered these pleadings as they were included in the First Amended Complaint against Kaminario. *See* No. 19-cv-350, D.I. 18 ¶¶ 25–27. Even taking as true that there was a technical problem associated with compression, that does not imply that the claims in the asserted patents are directed to a subject-matter eligible solution. I must consider the asserted patents based on what they claim and statements in unrelated patents do not change that analysis.

6. Pen and Paper Argument

Realtime now pleads that the asserted claims cannot be carried out on “pen and pencil.” *See, e.g.*, D.I. 43 ¶¶ 18, 50. Even assuming, without deciding, that this is a factual assertion I must take as true, it does not change my analysis. A

patent can be directed to an abstract idea even if it cannot literally be performed on pen and paper. *FairWarning IP, LLC v. Iatric Sysc.*, 839 F.3d 1089, 1098 (Fed. Cir. 2016) (“[T]he inability for the human mind to perform each claim step does not alone confer patentability.”). Regardless of whether the asserted patents are limited to being carried out in a computational environment, they are still directed to the type of abstract data manipulation that is not patent eligible. Otherwise, a patentee could ensure subject-matter eligibility simply by including as a limitation that the invention cannot be performed on pen and paper or in the human mind. This is inconsistent with governing law. *See Intell. Ventures I LLC v. Cap. One Bank (USA)*, 792 F.3d 1363, 1366 (Fed. Cir. 2015) (“An abstract idea does not become nonabstract by limiting the invention to a particular field of use or technological environment.”).

7. Conclusory Statements

The remaining amendments to the complaints consist of conclusory statements and legal argument. *See, e.g.*, D.I. 43 ¶ 14 (“[T]he patents are directed to patent eligible subject matter.”), ¶ 17 (“The claims of the patent are not abstract”), ¶ 27 (“The claims do not merely recite a result.”).⁴ I am to ignore such

⁴ Some of the legal conclusions in the complaint are assertions of novelty. *See, e.g.*, D.I. ¶ 21 (“The [#]728 patent solves the foregoing problems with novel technological solutions”). But novelty under § 102 is a separate issue than subject-matter eligibility under § 101. A novel abstract idea is still a patent-

pleadings in ruling on a motion to dismiss. *Iqbal*, 556 U.S. at 678 (“[W]e are not bound to accept as true a legal conclusion couched as a factual allegation.”); *Simio, LLC v. FlexSim Software Prod., Inc.*, 983 F.3d 1353, 1365 (Fed. Cir. 2020) (“We disregard conclusory statements when evaluating a complaint under Rule 12(b)(6). A statement that a feature ‘improves the functioning and operations of the computer’ is, by itself, conclusory.” (internal citation omitted)); *Boom! Payments, Inc. v. Stripe, Inc.*, 839 F. App’x 528, 533 (Fed. Cir. 2021) (finding allegations that the claims were not routine or conventional were conclusory statements to be disregarded).

B. Renewed Legal Arguments

Having found that none of Realtime’s amendments materially change my prior analysis, I incorporate my previous decision into this opinion, subject to the preceding discussion about the significance of the pen-and-paper criterion.⁵

Realtime’s legal arguments on these renewed motions are substantially similar to its previous arguments. Realtime again argues that the asserted patents “claim specific improvements in computer functionality.” D.I. 91 at 4. Because

ineligible abstract idea. *Adaptive Streaming Inc. v. Netflix, Inc.*, 836 F. App’x 900, 904 (Fed. Cir. 2020) (“We have explained that satisfying the requirements of novelty and non-obviousness does not imply eligibility under § 101, . . . because what may be novel and non-obvious may still be abstract.”).

⁵ Additionally, the discussion of U.S. Patent No. #204 is now moot because Realtime no longer asserts that patent.

Realtime repeats essentially the same arguments, there is no reason to reconsider my prior analysis. I again find that the asserted patents lack subject-matter eligibility under § 101. The unavoidable problem for Realtime is that data compression by itself is a type of information processing and information processing, without more, is patent-ineligible subject matter. The asserted patents do not have that something “more.” *See Elec. Power*, 830 F.3d at 1353–54. For the reasons I previously explained, the asserted claims do not identify specific techniques that provide a technical solution.⁶ Compression is an idea relevant to

⁶ As I explained in my prior opinion,

The patents do not provide a technical solution to a technical problem because they do not teach how to engineer an improved system. *See Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1345 (Fed. Cir. 2018) (explaining that a patent is not directed to a technical solution when it covers results without teaching how to obtain those results). The asserted patents allow the use of *any* compression method. *See* #908 patent 16:49–54 (“the data storage accelerator 10 employs . . . any conventional data compression method suitable for compressing data at a rate necessary for obtaining accelerated data storage); #825 patent at 7:7–11; #204 patent at 15:12–22; #203 patent at 16:30–16:42. The patents do not teach a technical solution to analyze data. *See, e.g.*, #825 patent at 16:15–24 (describing a content dependent data recognition module without any specificity). Nor do the patents teach how to achieve the claimed efficiency benefits, beyond directing the skilled artisan to apply well-known techniques. *See WhiteServe LLC v. Dropbox, Inc.*, No. 19-2334, slip op. at 9, (Fed.

information in general and is not inherently grounded in a particular technical environment. The results-based claims describe desirable outcomes and functionality, but do not offer ways to achieve these results. *See Affinity Labs of Texas, LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1269 (Fed. Cir. 2016) (finding claims abstract because they did “no more than describe a desired function or outcome, without providing any limiting detail that confines the claim to a particular solution to an identified problem.”). The patents are directed to abstract ideas. And the patents simply direct artisans to apply those ideas without teaching any additional inventive features. They are, therefore, subject-matter ineligible under the *Alice* test. *Alice*, 573 U.S. at 222–24.

Cir. Apr. 26, 2021) (finding patent invalid under § 101 when “[t]he specification d[id] not [] explain the technological processes underlying the purported technological improvement.”). In arguing that the patents teach a specific way of or structure for performing compression, Realtime is only able offer conclusory statements while repeating the same generic language in the claims. *See, e.g., Reduxio*, 17-1676, D.I. 14 at 10–12. In short, while the patents do disclose potential challenges (e.g., the problem of selecting the best compression method for given data), they do not teach *how* to address those challenges.

D.I. 41 at 42–43.

The cases cited by Realtime do not suggest a different outcome.⁷ In *Koninklijke KPN N.V. v. Gemalto M2M GmbH*, for example, the Federal Circuit explained that for a software patent “[t]o be patent-eligible, the claims must recite a specific means or method that solves a problem in an existing technological process.” 942 F.3d 1143, 1150 (Fed. Cir. 2019). The asserted claims, by contrast, may be performed using any means or methods that can implement the ideas to which the patents are directed. Realtime’s other cited cases are not applicable here because those opinions considered claims that were genuinely directed to technical problems inherently grounded in computer technology and that offered specific technical solutions. *See Packet Intel. LLC v. NetScout Sys., Inc.*, 965 F.3d 1299, 1309 (Fed. Cir. 2020), *cert. denied*, 209 L. Ed. 2d 552 (Apr. 19, 2021) (finding that the asserted patent solved a technical problem “unique to computer networks”);

⁷ Realtime filed as an exhibit a claim chart comparing claim 1 of the #728 patent to claims Realtime represents as being invalid. D.I. 91-1, Ex. 1. First, review of this claim chart shows substantial differences between claim 1 of the #728 patent and the comparison claims. The large differences make clear that the claims are not directly comparable. Second, Realtime compared claim 1 of the #728 patent to a claim that was in fact found invalid. D.I. 91-1, Ex. 1 at 1. The comparison claim, claim 1 of the patent at issue in *Koninklijke KPN*, was found invalid under § 101 and this finding was not appealed. *Koninklijke KPN N.V. v. Gemalto M2M GmbH*, 942 F.3d 1143, 1149 (Fed. Cir. 2019). And in finding the appealed claims valid, the Federal Circuit relied on a claim limitation that was in the appealed claims but not in claim 1 to show that the claims had a technological solution. *Id.* at 1150. Thus, comparing claim 1 of the #728 patent to claim 1 of the patent at issue in *Koninklijke KPN* only suggests that the #728 patent should also be invalid.

TecSec, Inc. v. Adobe Inc., 978 F.3d 1278, 1295 (Fed. Cir. 2020) (finding claims patent eligible because they were directed to solving a technical problem specific to computer network security); *Uniloc USA, Inc. v. LG Elecs. USA, Inc.*, 957 F.3d 1303, 1308 (Fed. Cir. 2020) (finding that “the claims at issue do not merely recite generalized steps to be performed on a computer using conventional computer activity”); *SRI Int’l, Inc. v. Cisco Sys., Inc.*, 930 F.3d 1295, 1303 (Fed. Cir. 2019), *cert. denied*, 140 S. Ct. 1108 (2020) (finding claims eligible at *Alice* step one because the claims were “directed to using a specific technique . . . to solve a technological problem” in network security).

There can be a fine—and often unclear—line between applying an abstract idea on technology and claiming a software-based improvement to technology. But in my view, the line here is clear, and the asserted claims do not have the specificity required of a technical solution. *See Elec. Power*, 830 F.3d at 1356 (“[T]here is a critical difference between patenting a particular concrete solution to a problem and attempting to patent the abstract idea of a solution to the problem in general.”); *Cf. Ericsson*, 955 F.3d at 1328 (finding claims invalid when they did “not have the specificity required to transform a claim from one claiming only a result to one claiming a way of achieving it” (internal quotation marks and alternations omitted)); *Free Stream Media Corp. v. Alphonso Inc.*, 996 F.3d 1355, 1363–64 (Fed. Cir. 2021) (finding claim directed to gathering, matching, and

sending information ineligible in part because “the asserted claims do not at all describe how [the claimed] result is achieved.”). The patentee had ideas about data compression, but rather than claim specific implementations of those ideas or provide new techniques to achieve the claimed results, the patentee sought and received claims on the ideas themselves. The patents claim abstract ideas without teaching how to implement those ideas. This is what § 101 jurisprudence prohibits.

IV. CONCLUSION

For the reasons stated above and in my prior opinion, D.I. 41, I find that all claims of the asserted patents are invalid under § 101 for lack of subject-matter eligibility. Accordingly, I will grant Defendants’ Renewed Motion to Dismiss.

The Court will issue Orders consistent with this Memorandum Opinion.