IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

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<tr><td>OASIS TOOLING, INC.,

   Plaintiff,

 v.

SIEMENS INDUSTRY SOFTWARE, INC.,

   Defendant.</td><td>)
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 v.

GLOBALFOUNDRIES U.S., INC.,

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MEMORANDUM OPINION

July 2, 2024
Wilmington, Delaware

Christopher J. Burke

BURKE, United States Magistrate Judge

Pending before the Court in these patent infringement cases are motions for summary judgment filed by Defendant Siemens Industry Software, Inc. ("Siemens") and Defendant GlobalFoundries U.S. Inc. ("GF" and collectively with Siemens, "Defendants"), pursuant to Federal Rule of Civil Procedure 56 (the "Motions"). (Civil Action No. 22-151-CJB, D.I. 237; Civil Action No. 22-312-CJB, D.I. 352)[1] With their Motions, Defendants move for summary judgment for lack of patent eligibility under 35 U.S.C. § 101 ("Section 101") with respect to the patents asserted against them: United States Patent Nos. 7,685,545 (the "'545 patent") and 8,266,571 (the "'571 patent"). Plaintiff Oasis Tooling, Inc. ("Oasis" or "Plaintiff") opposes the Motions. For the reasons that follow, the Court[2] GRANTS the Motions.

I. BACKGROUND

A. Factual Background

The two patents-in-suit, both titled "Methods and Devices for Independent Evaluation of Cell Integrity, Changes and Origin in Chip Design for Production Workflow," share a common specification.[3] The '545 patent issued on March 23, 2010 from U.S. Appl. No. 12/536,413,

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[1]   For simplicity's sake, hereafter the Court will refer to the "D.I." number in Civil Action No. 22-312-CJB, unless otherwise indicated.

[2]   On May 11, 2022, the parties consented to the Court's jurisdiction to conduct all proceedings in these actions, including entry of a final judgment. (Civil Action No. 22-151-CJB, D.I. 26; D.I. 19)

[3]   As such, the Court will cite below only to the '545 patent, unless otherwise noted.

which was filed on August 5, 2009. ('545 patent at 1)[4] The '571 patent issued on September 11, 2012 from U.S. Appl. No. 12/482,296, which was filed on June 10, 2009. ('571 patent at 1) The asserted patents claim priority to a provisional application filed in June 2008. ('545 patent at 1; '571 patent at 1) The patents relate to systems and methods for the granular analysis of design data utilized to prepare chip designs for manufacturing and to identify similarities and differences among design data residing in files. ('545 patent, Abstract; *see also* D.I. 421, ex. 1 at ¶¶ 91-92) The named inventors of the asserted patents include Thomas Grebinski, who founded Oasis in 2004. ('545 patent at 1; '571 patent at 1; D.I. 421, ex. 1 at ¶ 70) Oasis develops software for the semiconductor and fabrication industry. (D.I. 421, ex. 1 at ¶ 70)

Designing a chip is an iterative process, and chip designs are broken into hundreds of thousands of pieces known as "cells" which are grouped into "blocks[.]" ('545 patent, cols. 1:39-40, 4:38-39) Chip designs are created using different design tools and can be written in different design languages. (*Id.*, col. 4:12-15) Designing and manufacturing chips is a complex and expensive process. (*See, e.g.*, *id.*, cols. 2:13-14, 3:64-4:4)

The "Background of the Invention" section of the asserted patents explains that cells and blocks proceed through the chip design process at different rates. (*Id.*, col. 1:44-47) This process begins with internal development of cells and release by a design template vendor; the process continues thereafter as the cell and block designs cycle through multiple revisions. (*Id.*) Keeping track of the most recent version of cells and blocks in a chip design is difficult. (*Id.*,

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[4]   The asserted patents appear on the docket in these actions more than once. Herein, the Court will cite to the patents by their patent number.

col. 1:47-49) A design ready for release to production could involve as many as 40,000 unique

cells. (*Id.*, col. 2:12-13)

When chip production starts, it is essential that the cells and blocks of the design are the

correct version. (*Id.*, cols. 3:66-4:4) Indeed, using the incorrect version "can cost millions of

dollars and months of delay[,]" and the potential for using an obsolete version of a cell is

"everywhere[.]" (*Id.*, cols. 1:54-55, 4:1-4; *see also id.*, col. 2:12-15)

At the time of the inventions, existing design data management tools lacked an auditing

capability that would allow project managers to verify that the cells in a chip design are of the

latest approved version, or to determine whether a proposed design update would be usable in a

design approaching the final "tapeout" process. (*Id.*, cols. 2:15-20, 4:22-31) In order to track

and find changes in cell data in a file during the design of a circuit, one approach was to start by

utilizing a differencing tool.[5] (*Id.*, col. 2:22-26) The specification notes, however, that the use

of differencing tools had some drawbacks. These tools were not able to take into account

differences in design language, nor were they able to analyze whether certain changes were

significant or had a functional impact on the chip being produced. (*Id.*, col. 2:25-32) Thus, in

order to track and find meaningful changes in cell data in a file during the design of a circuit, a

designer might have to manually analyze millions of lines of data, typically after using the

differencing tool. (*Id.*, col. 2:22-26) This process was not particularly "robust or efficient." (*Id.*,

col. 2:43-44)

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[5]   According to Defendants, running a differencing tool is akin to running a
"redline" in a word processor. (D.I. 353 at 2; Tr. at 91) Plaintiff does not dispute this. (*See* D.I.
409 at 3-4)

Another problem with then-existing chip-level design template management systems was that they could not effectively determine when parts of different chip designs included the same cells. (*Id.*, col. 4:8-10, 18-21) For example, when a yield problem was discovered in a product that utilized a particular design template, it was difficult to determine what other projects used that same template. (*Id.*, col. 1:49-52)

In light of all of these problems, the patent specification highlights a need to develop new tools to analyze design data—and more specifically to enable "granular evaluation of design data at various junctures in the design work flow." (*Id.*, col. 2:63-65) The specification explains that such tools may result in work flows and product designs that are improved, more error free, more transparent and more resilient. (*Id.*, col. 2:63-67)

The inventors of the asserted patents set out to provide tools and methods to allow for such granular analysis of design data and to enable the identification of meaningful similarities and differences in design data files. (*Id.*, col. 3:3-6) The "Summary/Overview" section of the patents' specification explains that the disclosed technology "relates to parsing data and organizing it into canonical forms, digesting the canonical forms, and comparing digests of design data from different sources, such as chip-level designs and design template libraries." (*Id.*, col. 3:6-10) The patent notes that organizing the data into canonical forms reduces the sensitivity of the analysis to differences in the data that do not have a functional impact on the design. (*Id.*, col. 3:10-13)

Further relevant facts related to resolution of the Motions will be set out as needed in Section III.

B.   **Procedural Background**

Oasis filed its Complaint against Siemens on February 1, 2022 in Civil Action No. 22-151-CJB. (Civil Action No. 22-151-CJB, D.I. 1) Oasis accuses Siemens' DBdiff, Pattern Matching, and Auto-Waivers functionalities of infringing claims 1-5, 7, 10-13, 15 and 16 of the '571 patent, and claims 1-4, 6, 10-12, 14 and 17-20 of the '545 patent. (Civil Action No. 22-151-CJB, D.I. 231 at ¶ 1; Civil Action No. 22-151-CJB, D.I. 261 at ¶ 1)

Oasis filed its Complaint against GF on March 9, 2022 in Civil Action No. 22-312-CJB. (D.I. 1) Oasis accuses GF's DRC+, Design for Manufacturability ("DFM") tool, and Process Design Kits ("PDKs") incorporating or accessing DFM or DRC+, and certain GF Technology Platforms[6] of infringing claims 1-3, 5, 7, 12, 15 and 16 of the '571 patent, and claims 1-3, 6, 14 and 20 of the '545 patent. (D.I. 362, ex. 5 at ¶ 18; D.I. 414 at ¶ 3)

In lieu of filing answers to the Complaints, both Defendants filed motions to dismiss, in which they argued that the asserted patents are directed to patent-ineligible subject matter pursuant to Section 101. (Civil Action No. 22-151-CJB, D.I. 13; D.I. 14) The Court considered Defendants' motions to dismiss together and denied them in a March 31, 2023 Memorandum Opinion (the "Section 101 motion to dismiss MO"); this decision will be discussed further below. (D.I. 103) On November 17, 2023, the Court issued a Memorandum Opinion and Order on claim construction (the "claim construction MO") in both cases. (D.I. 317)[7]

GF filed its instant Motion on February 2, 2024, (D.I. 352), and briefing was completed on March 15, 2024, (D.I. 445). Siemens filed its instant Motion on February 16, 2024, in which

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[6]   Specifically, Oasis accuses the DRC+ tool in combination with certain pattern matching software supplied by electronic design automation vendors Cadence, Siemens and Synopsys. (D.I. 362, ex. 5 at ¶¶ 19-21)

[7]   The Court incorporates by reference here the Section 101 motion to dismiss MO and the claim construction MO. (D.I. 103; D.I. 317)

it joined GF's Motion and the briefing in support thereof (in order to avoid burdening the Court with additional briefing). (Civil Action No. 22-151-CJB, D.I. 237)[8] The Court heard oral argument on the Motions (as well as other summary judgment motions) on May 17, 2024. (D.I. 491 (hereinafter, "Tr."))

II. STANDARD OF REVIEW

The Motions contend that the asserted claims of the '545 patent and '571 patent are directed to patent-ineligible subject matter. The Court has set out the relevant legal standards for review of a summary judgment motion brought on Section 101 grounds in *S.I.SV.EL. Societa Italiana per lo Sviluppo Dell'Elettronica S.p.A v. Rhapsody Int'l Inc.*, Civil Action No. 18-69-MN-CJB, Civil Action No. 18-70-MN-CJB, 2019 WL 1102683, at *2-4 (D. Del. Mar. 8, 2019). The Court hereby incorporates its discussion of these legal standards in *S.I.SV.EL.* and will follow those standards herein. To the extent consideration of the Motions necessitates discussion of other, related legal principles, the Court will set out those principles in Section III below.

III. DISCUSSION

In the Section 101 motion to dismiss MO, the Court assessed the eligibility of claim 14 of the '545 patent, treating it as representative of the other claims at issue. (D.I. 103 at 8) Now with the instant Motions, Defendants again treat claim 14 of the '545 patent as representative (though they argue that each of the asserted claims of the asserted patents is ineligible). (D.I. 353 at 3) For purposes of step one of the *Alice* test, Plaintiff treats claim 14 as representative too; that said, Plaintiff does briefly address a few additional claims in its step two discussion. (D.I. 409 at 5, 14-15)

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[8]   Siemens notes that any determination of patent ineligibility would apply equally to the case against it, as the same two patents are asserted in both cases. (D.I. 237 at 1)

Below the Court will follow the parties' lead and will address the Section 101 issues writ large at both steps by focusing on claim 14. At the step two stage, the Court will also address the additional claims that Plaintiff references in its briefing. Claim 14 recites:

> **14**. A device that evaluates similarities and/or differences between design data for circuits, the design data residing in at least two files stored in computer memory, the device including:
>
> at least one processor and memory;
>
> a parser running on the processor, that parses a file containing design data representing aspects of a design for a physical circuit and creates one or more syntax trees in the memory;
>
> normalizer logic running on the processor and cooperating with the parser that organizes the syntax trees to produce canonical forms, wherein the normalizer logic includes:
>
> a partitioning module that partitions the file into at least one header and, depending on rules of a design language used to encode the file, into multiple cells of design data and organizes the syntax trees to represent the header and cell partitions; and
>
> a canonical forming module that interprets the syntax trees to produce canonical forms of the design data, wherein the canonical forms reduce sensitivity of data analysis to non-functional variations in the design data;
>
> a digester module running on the processor that receives the canonical forms for at least selected partitions and calculates and stores in the memory at least one digest per selected partition;
>
> a comparer module running on the processor that receives and compares the digests of at least a first file and a second file, which contain design data; and
>
> a reporter module running on the processor and coupled to the digester that summarizes at least some of the matches and/or differences detected by the comparisons of digests.

('545 patent, cols. 85:40-86:14)

A. *Alice*'s Step One

The Court first assesses step one of the two-part test for patent eligibility set out in *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208 (2014).[9] The step one inquiry asks whether the claim at issue is "directed to" an abstract idea. In this type of a patent case, the relevant step one question is whether the claims are directed to an improvement in computing devices or other technology (in which case the claim would be patent-eligible), or whether they are instead directed to a "process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool" (in which case the Court would then proceed to *Alice*'s step two). *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335-36 (Fed. Cir. 2016). It is well-settled that if claims are directed to the concepts of "collecting information, including when limited to particular content (which does not change its character as information) . . . . analyzing information by steps people go through in their minds, or by mathematical algorithms, without more" and "merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation)[,]" they do not pass muster under step one and are directed to an abstract idea. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353-54 (Fed. Cir. 2016); *see also Brit. Telecommc'ns PLC v. Palo Alto Networks, Inc.*, Civil Action No. 22-1538-CJB, 2023 WL 7634934, at *2 (D. Del. Nov. 14, 2023).

At the motion to dismiss stage, Defendants had articulated the abstract idea to which the asserted patents were directed as "parsing, standardizing and comparing data for similarities and differences." (D.I. 103 at 9-10) In the Section 101 motion to dismiss MO, the Court concluded that this was, indeed, an abstract idea. (*Id.*); *see also Berkheimer v. HP Inc.*, 881 F.3d 1360,

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[9]   It is worth noting that the two asserted patents here were issued before the Supreme Court of the United States decided *Alice*.

1366 (Fed. Cir. 2018) (claims directed to "parsing and comparing [standardized] data" were directed to an abstract idea).[10]

The Court then went on to analyze whether claim 14 was in fact directed to that abstract idea. In doing so, the Court explained that this inquiry presented a "tough call" that was "not free from doubt"—in part due to the strength of some of Defendants' arguments. (D.I. 103 at 11-13, 15) Ultimately however, the step one answer was not then clear to the Court. This was because "Plaintiff [could] point to evidence indicating that claim 14 is directed to something narrower or more specific than the abstract idea at issue[.]" (*Id*. at 13) In that regard, the Court explained that claim 14 made use of two concepts that did not seem to be neatly captured by Defendants' articulation of the abstract idea. These were the claim requirements that: (1) the "canonical forms" produced by the claimed device must "reduce sensitivity of data analysis to non-functional variations in the design data[;]" and (2) that the device then used "digests" to represent the canonical forms in the comparison process. (*Id*. at 13-15) Because it was unsure about whether the proposed abstract idea fully captured these two concepts, and in light of the other arguments before it, the Court concluded that it was best to resolve Defendants' motions to dismiss by proceeding to step two. (*Id.* at 15)

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[10] As the Court noted in the Section 101 motion to dismiss MO, one of the asserted claims at issue in *Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018) "recited, before the parsing step, converting an input item to a *standardized format* for input to the parser." (D.I. 103 at 20 n.17 (emphasis in original) (internal quotation marks and citation omitted)); *see also* *Berkheimer*, 881 F.3d at 1367 (highlighting the specification's explanation that the parser "'determines and extracts components of the *standardized document* or item representation' and reassembles the components 'into composite output files[,]'" and concluding that the claims at issue were directed to parsing and comparing data) (emphasis added) (citation omitted); *see also* *infra* n.14.

Now, in bringing the instant Motions, Defendants have submitted a new, slightly-different articulation of the abstract idea that claim 14 is purportedly directed to: "analyzing (parsing, standardizing, digesting, and comparing) data to identify similarities and/or differences." (D.I. 353 at 3) As can be seen above, the primary distinction between this new articulation and the prior one is that the concept of "digesting" data is now squarely included in Defendants' proposed abstract idea.[11] From there, Defendants submit that it is "now clear" that the presence of the two claimed concepts that the Court highlighted in its prior step one analysis should not be a bar to a finding that claim 14 is directed to this abstract idea. (*Id.* at 8)

The Court agrees with Defendants. It will explain why in three steps. First, the Court will address the two claimed concepts that it highlighted in its Section 101 motion to dismiss MO—and show why it is now evident that claim 14's inclusion of those concepts is no barrier to Defendants' step one argument. Next, the Court will re-assess claim 14 as a whole, explaining why it is otherwise clear that the claim is directed to the proffered abstract idea. Lastly, the Court will address the primary arguments Plaintiff makes at step one, noting why each is not successful.

1. The Claim's Utilization of Canonical Forms and Digesting

As an initial matter, the Court will revisit the two claimed concepts it discussed at length in the Section 101 motion to dismiss MO's step one section.

The first was that the "canonical forms" created by the claimed device have to "reduce sensitivity of data analysis to non-functional variations in the design data[.]" ('545 patent, col.

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[11] As the Court explained in its Section 101 motion to dismiss MO, the concept of digesting was *not* captured in the abstract idea that Defendants had put forward at the pleading stage. (D.I. 103 at 14-15; Tr. at 94)

86:1-3) Does this requirement suggest that the claim is directed to something other than an abstract idea? Now that claim construction is complete, the answer to this question is clearly "no."

After the Section 101 motion to dismiss MO was issued, the Court construed "canonical forms" to mean "a standardized form of a body of design data." (D.I. 317 at 15, 52) This helped to underscore that when claim 14 requires that a canonical forming module "produce canonical forms" (the parties sometimes refer to this as the "normalizing" step), that is simply another way of saying that the module must "standardize data." (*See* D.I. 353 at 3, 8; D.I. 445 at 1; Tr. at 98, 101; *see also* D.I. 103 at 5 n.5)

But what type of "standardization" of data is *required* via the claim's production of canonical forms? (Tr. at 101-02) And did the answer to that question—i.e., about the manner and degree to which the claimed canonical forms must "reduce sensitivity of data analysis to non-functional variations in the design data"—impact whether claim 14's use of this concept amounts to anything other than the utilization of an abstract idea? (*Id.*) Again here, the claim construction process was instructive.

Importantly, in its claim construction MO, the Court concluded (as advocated by Plaintiff) that the patents do not require "a minimum amount of reduction that must be achieved in order to practice the claims[.]" (D.I. 317 at 11; *see also* Tr. at 102) And although Plaintiff seemed to take the opposite position at the pleading stage, (D.I. 53 at 92),[12] during the *Markman*

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[12]   During oral argument regarding the Section 101 motion to dismiss, Plaintiff's counsel, after initially equivocating on the issue, (D.I. 53 at 88, 90), eventually stated "[s]o I don't think that removing white space alone would be enough" to reduce sensitivity to non-functional variations, (*id.* at 91-92).

hearing, Plaintiff's counsel acknowledged that even merely "[e]liminating white space"[13] is

sufficient to practice this claim limitation, (D.I. 354, ex. 1 at 14-16; *see also, e.g.*, '545 patent,

col. 5:43-47 (noting that the "canonical digest tools" described by the patents "can distinguish

between trivial changes such as whitespace"); *id.*, cols. 1:35, 3:18-19). Thus, it is now settled

that the required output of claim 14's canonical forming module can simply be the production of

canonical forms wherein sensitivity to non-functional variations is reduced via the elimination of

white space—and nothing more than that. This is significant, in that eliminating extra white

space in one piece of data (as part of the process of comparing it to another piece of data) is

something that surely can be performed by the human mind—i.e., by "mentally recognizing two

sentences are functionally the same despite extra spaces." (D.I. 353 at 8; *see also* D.I. 445 at 1;

Tr. at 102, 152; Defendants' MSJ of Patent Ineligibility Slides at Slide 14) When a concept

amounts to the performance of a "mental process"—something that can be done in the human

mind—that is "a telltale sign of abstraction." *PersonalWeb Techs. LLC v. Google LLC*, 8 F.4th

1310, 1316 (Fed. Cir. 2021). And so it is now clear that claim 14's production of canonical

forms that reduce sensitivity of data analysis to non-functional variations in design data does not

render claim 14's focus any less abstract.[14]

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[13] "Eliminating white space" essentially means taking note of the fact that a difference between two pieces of design data is that one has an extra white space or spaces between two characters as compared to the other—and then correcting for that in some way (e.g., by removing the extra space or spaces or ignoring the extra space or spaces) in the canonical forming/digesting process. (*See* '545 patent, cols. 20:22-25, 50:61-64)

[14] *See, e.g.*, *Univ. of Fla. Research Found., Inc. v. Gen. Elec. Co.*, 916 F.3d 1363, 1366-68 (Fed. Cir. 2019) (finding that the representative claim reciting "a bedside device connected to . . . bedside machines that convert[s] received data streams from the bedside machines to . . . . standardized data . . . for display" was directed to the "abstract idea of collecting, analyzing, manipulating, and displaying data") (internal quotation marks omitted); *Glasswall Sols. Ltd. v. Clearswift Ltd.*, 754 F. App'x 996, 998-99 (Fed. Cir. 2018) (finding that a claim that called for, *inter alia*, the steps of "'parsing the content data in accordance with a

The Court next turns to the second concept that it highlighted at the step one stage in the

Section 101 motion to dismiss MO: that the device utilizes "digests" to represent the canonical

forms as part of the comparison process. As was noted above, Defendants have now modified

their articulation of the abstract idea so that it expressly captures this concept of digesting. (*See*

D.I. 353 at 8; Tr. at 94, 101) This leaves the Court to determine whether "digesting" data is itself

an abstract idea, or something more than that.

Here again, the claim construction process was useful. The Court construed "digest[s]"

to mean "output of a hash function, including, e.g., CRC or MD5." (D.I. 317 at 52)[15] In their

briefing, Defendants contend that digesting design data with a hash function amounts to an

abstract idea. And Plaintiff does not really seem to disagree with that notion. (*See* D.I. 409 at 6,

13)

The Court concludes that Defendants are correct. Indeed, the United States Court of

Appeals for the Federal Circuit's decision in *PersonalWeb Techs. LLC v. Google LLC*, 8 F.4th

1310 (Fed. Cir. 2021) leaves no doubt as to this issue. (D.I. 353 at 5; Tr. at 94, 103) In

PersonalWeb, the patents at issue were directed to data processing systems that assigned each

data item a content-based identifier; the identifier was generated by a mathematical algorithm,

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predetermined data format'" and determining nonconforming data merely required "the conventional manipulation of information by a computer" and was directed to the abstract idea of "filtering nonconforming data and regenerating a file without it"); *Intell. Ventures I LLC v. Cap. One Fin. Corp.*, 850 F.3d 1332, 1340-41 (Fed. Cir. 2017) (finding patent claims directed to the "creat[ion of] specific data structures to interrelate various XML documents in a particular way to ensure compatibility of otherwise incompatible documents. . . . [and] that detect[] modifications to the dynamic document and in response thereto, propagate[] those changes back to the underlying XML document" were directed to the abstract idea of "organizing, displaying, and manipulating data of particular documents").

[15]   The specification explains that "[a] variety of hash functions can be used to create the digests, such as CRC, MD5 and others." ('545 patent, col. 6:8-9)

such as a cryptographic hash, and the identifier changed when the data item's content changed. *PersonalWeb*, 8 F.4th at 1312-13, 1315-16. The content-based identifier was then compared against another content-based identifier, and the results were used to control access to data items, to retrieve and deliver copies of data items, and to mark copies of data items for deletion. *Id*. The *PersonalWeb* Court explained that the components of the claims' three-step process—i.e., (1) the use of a content-based identifier (like a hash); (2) comparing the content-based identifier against other values; and (3) controlling access to data, retrieving data items, and marking data for deletion—were all abstract concepts, as each of them amounted to "mental processes[.]" *Id*. at 1316-17. Looking to the claim's character as a whole, the *PersonalWeb* Court concluded that "[s]tringing together" these abstract concepts in the claims "by [a]dding one abstract idea [] to another" did not save the claims from being directed to "abstract-idea processes[;]" there, the claims were "directed to a medley of mental processes that, taken together, amount only to a multistep mental process." *Id*. at 1317-18 (internal quotation marks and citations omitted).

In sum, these two claimed concepts—(1) producing "canonical forms" that "reduce sensitivity of data analysis to non-functional variations in the design data" and (2) "digest[ing]" those canonical forms—are abstract ideas that can be accomplished in the human mind.[16]

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[16]   It is also worth noting that even if one were focusing not on human activity, and instead were simply assessing the computer arts, the record indicates that there is a longstanding history of employing computers to make use of these two concepts together in order to identify similarities or differences in data sets. (D.I. 353 at 8-9) To that end, Defendants point to a 1995 article entitled "Copy Detection Mechanisms for Digital Documents" ("Brin"). Brin describes a process for detecting plagiarism by: (1) converting a document into a "canonical form[;]" (2) determining and hashing the document's individual sentences into numerical keys; (3) storing these into a hash table; and then (4) checking a new document against existing documents by converting the document into canonical form, generating a list of hash keys, and looking them up in the hash table. (D.I. 354, ex. 4 at 398, 403-04 (Brin noting that with the conversion process, non-functional content is eliminated, by stating "[w]e [] choose to discard all text formatting commands that effect the presentation, but not the content of the document. For example,

2. Assessing Claim 14 as a Whole at Step One

To recap, the Court has now explained: (1) how in the Section 101 motion to dismiss MO at step one, it identified two claimed concepts that gave it pause about concluding that the claim was directed to the then-proffered abstract idea; but (2) why now, after having reviewed the current record, it believes that neither of those two concepts should stand in the way of a finding in Defendants' favor at step one. Having done that, the Court next re-assesses claim 14 as a whole. In doing so, it asks: "Is this claim directed to the abstract idea of "analyzing (parsing, standardizing, digesting, and comparing) data to identify similarities and/or differences"? The Court concludes that it is.

As the Court explained in the Section 101 motion to dismiss MO, the steps of claim 14 tell us that the device at issue includes:

> (1) a data processor and memory; (2) a parser that parses a file containing design data and that creates one or more syntax trees in the memory; (3) normalizer logic that organizes the syntax trees to produce canonical forms (i.e., "standardizing" the data) and that reduces sensitivity of data analysis to non-functional variations in the data; (4) a digester module that receives the canonical forms and calculates and stores at least one digest per selected partition; (5) a comparer module that receives and compares the digests of

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command sequences to produce italic type and change font are removed and ignored[.]"); *id.*, ex. 6 at ¶ 911; Tr. at 109 (Defendants' counsel noting that Brin helps to show that these concepts are "long known, well-known [and] abstract")) Plaintiff does not seem to dispute that Brin indicates as much. But it argues that there is no record of computers using these steps *in the realm of chip design.* (Tr. at 138-39 (Plaintiff's counsel arguing that the claims are patent eligible because "when I look at the claims and I'm looking at this technology, I haven't seen anything about people putting [data] in canonical forms in order to form digests. I haven't seen anything like that *in circuit design.*") (emphasis added); *see also id.* at 128, 130-31 (same)) Yet merely applying a longstanding, abstract idea to the world of chip design could not save the claims. That is because it is settled law that "[a]n abstract idea does not become nonabstract by limiting the invention to a particular field of use or technological environment[.]" *Intell. Ventures I LLC v. Cap. One Bank (USA)*, 792 F.3d 1363, 1366 (Fed. Cir. 2015); *see also Skillz Platform Inc. v. AviaGames Inc.*, Case No. 21-cv-02436-BLF, 2022 WL 783338, at *15 (N.D. Cal. Mar. 14, 2022) (citing cases); *see also* (Tr. at 139-40, 144).

> files containing design data; and (6) a reporter module that
> summarizes similarities and differences.

(D.I. 103 at 11-12; *see also* '545 patent, cols. 85:40-86:14) Therefore, just by looking at the claim, one can see that a significant portion of it relates to parsing, standardizing, digesting, and comparing chip design data in order to identify similarities and/or differences. The "Background of the Invention" section of the specification likewise describes the claimed technology as being focused on this idea, i.e., on:

> parsing data and organizing it into canonical forms, digesting the
> canonical forms, and comparing digests of design data from
> different sources . . . . Organizing the design data into canonical
> forms generally reduces the sensitivity of data analysis to
> variations in the data that have no functional impact on the design.

('545 patent, col. 1:22-28) And the patents' Abstract and "Summary/Overview" section do the same. (*See id*. at Abstract; *id*., col. 3:3-22); *see also Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1347-48 (Fed. Cir. 2015) (examining the patent's specification at step one, in order to determine what the claims at issue were "directed to"). The specification additionally tells us that only generic computer components (i.e., "a processor and memory" and "a computer readable storage medium that stores program code for carrying out" the methods) are required to carry out these steps. ('545 patent, cols. 78:49-50, 81:42-49)

This all supports the Court's conclusion that claim 14 is directed to the abstract idea put forward by Defendants. That conclusion is only further bolstered when assessing Plaintiff's step one counterarguments, which are not winning ones. The Court takes those up next.

3. Plaintiff's Step One Counterarguments

Plaintiff makes five different arguments as to why claim 14 should be deemed patent eligible at *Alice*'s first step. (D.I. 409 at 5-13) For the reasons that follow, none of those are persuasive.

First, Plaintiff argues that claim 14 is not directed to the abstract idea put forward by Defendants, but instead to "solutions to . . . problems rooted in computer technology" that "improve computer functionality[.]" (*Id.* at 5, 8; *see also id*. at 5-11) Plaintiff further asserts that claim 14 is not directed to an abstract idea because it does not automate a manual process, and because it is not capable of being performed by the human mind. (*Id.* at 11-13) Here, Plaintiff is invoking Federal Circuit law; as was noted above, that law explains that in order to constitute a "patent-eligible improvement to computer functionality[,]" the claims must be "directed to an improvement in the functionality of the computer or network platform itself[;]" that is, "it is not enough . . . to merely improve a fundamental practice or abstract process by invoking a computer merely as a tool." *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1364 (Fed. Cir. 2020); *see also KOM Software Inc. v. NetApp, Inc.*, Civil Action No. 18-160-WCB, 2023 WL 6460025, at *4 (D. Del. Oct. 4, 2023) ("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.").

The record, however, shows that Plaintiff is incorrect; claim 14 is *not* directed to an improvement in computer functionality. This is so because the asserted patents' solution to the problem of recognizing functional differences in design data was to use a computer to parse design data, standardize that data (while eliminating non-functional differences), calculate and store digests representing that data, and then use the digests to identify and summarize any

functional differences. (*See* D.I. 353 at 6) These claimed steps, as Defendants point out, "are

akin to mental processes humans perform when comparing documents in different formats or

languages—by parsing (which humans do when reading), normalizing (e.g., ignoring

insignificant differences such as whitespace), digesting (e.g., distilling), and comparing (e.g.,

determining passages make the same points)" which is a "hallmark of abstraction." (D.I. 445 at

2; *see also* D.I. 353 at 6 n.4); *see, e.g.*, *PersonalWeb*, 8 F.4th at 1316 (finding that claims

directed to the use of an algorithm-generated content-based identifier to perform data-

management functions had an abstract focus, where these functions were done "in a computer

environment" but were still mental processes that could be performed in the human mind).[17]

The specification underscores the correctness of this conclusion—i.e., that the claims use

computers as a tool to fix what was essentially a *human problem* (not a problem with computer

functionality) that humans had previously been attempting to solve in a more unwieldly fashion.

As was noted above, the specification explains that differencing tools were used to track cell data

during the design process. An issue was that such tools "typically subtract[ed] the differences

between files, without analysis of whether the changes have a functional impact on the chip

being produced or whether they are significant." ('545 patent, col. 2:29-32) As a result, after the

use of a differencing tool, designers would have to "resort to a manual analysis of millions of

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[17]   Now, it may be, for example, that a human cannot literally perform the claimed
step of organizing data into a syntax tree in her mind, or that it would take unduly long for her to
do so as to any significant amount of data. But the "asserted claims can be directed to an abstract
idea even if the claims require generic computer components or require operations that a human
could not perform as quickly as a computer." *Trinity Info Media, LLC v. Covalent, Inc.*, 72 F.4th
1355, 1363-64 (Fed. Cir. 2023); *see also Content Extraction & Transmission LLC v. Wells Fargo
Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (concluding that the claims were
directed to the abstract idea of data recognition and storage even though "human minds are
unable to process and recognize the stream of bits output by a scanner").

lines of data" in order to decipher whether any identified differences in compared data were significant or not. (*Id.*, col. 2:23-25) Put differently, the patent tells us that humans used to use a differencing tool and their minds in order to: (1) identify cell design data for review, (2) put that data into a standardized format and then (3) identify any non-functional differences in that data. (D.I. 445 at 2) And using hash values to digest standardized data and then comparing such digested data is something that humans could have done in the past. ('545 patent, col. 59:21-23 (specification describing an exemplary report, noting that the "comparisons do not show the exact nature of the differences between the headers and the cells; they simply tell the user where to look"); *see also id*., col. 69:35-37; *id*., col. 71:26-32)

Second, Plaintiff argues that the asserted claims "allow for *more accurate, faster comparisons* of chip design data on a more granular scale than was previously possible[.]" (D.I. 409 at 8 (emphasis added)) But even if this is so, it is of little moment. The Federal Circuit has made clear that if the addition of computerized steps to a claim simply allows an otherwise manual process to be performed *more quickly* or *more accurately* than a human could accomplish, this cannot save a claim at step one. *Cf. OIP Techs., Inc. v. Amazon.com*, *Inc*., 788 F.3d 1359, 1363 (Fed. Cir. 2015) (concluding at step two that just because a computerized method might be able perform a task "more quickly or more accurately" than a human, this does not mean that the method is patent eligible). That is because in such circumstances, the computer is being used simply as a tool—i.e., it is being employed only for "its most basic function—making calculations or computations" in a manner that is interchangeable with the mental process at issue. *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012). In sum, this argument fails to "explain how the *computer's* functionality is improved beyond the inherent improvement of the experience of" a chip

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designer. *Simio, LLC v. FlexSim Software Prods., Inc.*, 983 F.3d 1353, 1360-61 (Fed. Cir. 2020) (emphasis in original); *cf. Trading Techs. Int'l, Inc. v. IBG LLC*, 921 F.3d 1084, 1094 (Fed. Cir. 2019) (concluding at step two that the claims did not recite an inventive concept, where the invention did not improve computer functionality, but instead "helps the trader process information more quickly").

Third, Plaintiff's briefing highlights various Section 101 cases that purportedly support its step one position. (D.I. 409 at 7-8, 11; Tr. at 155) But those cases are inapposite. Unlike what claim 14 represents, each of Plaintiff's cited cases involved claims directed to improvements in network technology or to the functionality of the computer itself. For example, in *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016), the Federal Circuit found that the claims were "focused on a specific asserted improvement in computer animation, i.e., the automatic use of [unconventional] rules of a particular type" that were not previously used by animators. 837 F.3d at 1303, 1314. In *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299 (Fed. Cir. 2018), the Federal Circuit held that claims were to a "behavior-based virus scan" resulting in a new type of computer file; the claims provided greater computer security than what had been available in the art, and were thus directed to a patent-eligible improvement in computer functionality. 879 F.3d at 1304-06; (Tr. at 150). In *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356 (Fed. Cir. 2018), the Federal Circuit ruled that claims reciting a better user interface for electronic devices that improved the efficiency of using those devices, "particularly those with small screens[,]" were patent eligible. 880 F.3d at 1362-63. In *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016), the Court concluded that claims were patent eligible where they recited a self-referential table for a computer database that improved computer storage technology. 822 F.3d at 1336-37. In

Koninklijke KPN N.V. v. Gemalto M2M GmbH, 942 F.3d 1143 (Fed. Cir. 2019), the Federal

Circuit found that the claims at issue were directed to an improved check data generating device,

which enabled data transmission systems to detect a specific type of error that prior art systems

could not. 942 F.3d at 1145-46. And finally, in *Packet Intelligence LLC v. NetScout Sys., Inc.*,

965 F.3d 1299 (Fed. Cir. 2020), which involved claims to methods for monitoring packets

exchanged over a computer network, the Federal Circuit determined that the representative claim

was not directed to an abstract idea because it concerned a "challenge unique to computer

networks" and "solve[d] a technological problem[.]" 965 F.3d at 1303-04, 1309.

Fourth, Plaintiff attempts to emphasize the "specificity" of the claims. To that end, it

notes that claim 14 requires parsing design data into a syntax tree, which is a "specific data

structure." (D.I. 409 at 6; *see also* Tr. at 134) And that is true, so far as it goes. But the

presence of a "specific data structure" in a claim does not necessarily mean that the claim cannot

be directed to an abstract idea. In *Intell. Ventures I LLC v. Cap. One Fin. Corp.*, 850 F.3d 1332

(Fed. Cir. 2017), the claims at issue recited "specific data structures and objects" that were used

to interrelate various XML documents in a "particular way to ensure compatibility of otherwise

incompatible documents[.]" 850 F.3d at 1340. This did not save the claims, however. Instead,

the Federal Circuit explained that while "these data structures add a degree of particularity to the

claims, the underlying concept embodied by the limitations merely encompasses the abstract idea

itself of organizing, displaying, and manipulating data of particular documents." 850 F.3d at

1340-41. So too here.[18] That the claimed device produces canonical forms from data that has

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[18]   In this section of its briefing, Plaintiff repeatedly retorts that the claims require a
"specific implementation[]" (one that includes parsing the data, standardizing the data, digesting
the data, and then comparing the data) and thus go beyond the "broad" abstract idea of
"comparing data." (D.I. 409 at 6-7) But Defendants are not asserting that the claims simply

been parsed into syntax trees does not alter the reality that the claims are simply about the abstract idea of analyzing such data in order to detect similarities or differences.

Fifth and finally, Plaintiff sets out evidence of "long-felt need" and praise of the inventions as indicating that the asserted claims improve computer functionality. (D.I. 409 at 8-11) Both of these factors—long-felt need and industry praise for the patented invention—are objective indicia of non-obviousness (sometimes referred to as "secondary considerations" of non-obviousness). *See Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1052 (Fed. Cir. 2016). The Federal Circuit has stated that "[q]uestions of nonobviousness such as secondary considerations . . . are irrelevant when considering eligibility." *Ficep Corp. v. Peddinghaus Corp.*, 2022-1590, 2023 WL 5346043, at *7 (Fed. Cir. Aug. 21, 2023) (citing cases); *see also WhitServe LLC v. Dropbox, Inc.*, 854 F. App'x 367, 373 (Fed. Cir. 2021).

4. Conclusion

For all of the above reasons, the Court agrees with Defendants that claim 14 is directed to the abstract idea of "analyzing (parsing, standardizing, digesting, and comparing) data to identify similarities and/or differences." It thus proceeds to step two.

B. *Alice*'s Step Two

At step two, the Court examines the claims to determine if they contain "significantly more" than the abstract idea to which the claims are directed—i.e., an "inventive concept." *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 217-18 (2014) (internal quotation marks and

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"compar[e] data." Instead, their clear (and correct) assertion is that the claims are directed to parsing, standardizing, digesting *and* comparing data in order to identify similarities and/or differences. (D.I. 353 at 3, 4, 9) Those are all ways of analyzing data that are, without more, essentially mental processes (processes speeded along here by reliance on a computer) and that fall within the abstract-idea category. *See Elec. Power Grp.*, 830 F.3d at 1353-54.

citation omitted). Although the inventive concept at issue must actually be evident in the claims, *see Two-Way Media Ltd. v. Comcast Cable Commc'ns*, 874 F.3d 1329, 1338 (Fed. Cir. 2017) (finding a claim ineligible where "the *claim*—as opposed to something purportedly described in the specification—is missing an inventive concept") (emphasis in original), the unconventional nature of a particular claimed feature or its benefits over the prior art need not be described in the claims themselves, *see Affinity Labs of Tex., LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1271 (Fed. Cir. 2016) (looking to both the "claims [and] the specification" in the step two inquiry); *cf. Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1317 (Fed. Cir. 2019).

When the Court assessed this step two question at the motion to dismiss stage, it noted that aside from the then-asserted abstract idea of "parsing, standardizing and comparing data for similarities and differences," Plaintiff had focused on the presence of the same two claimed concepts that were discussed above: (1) the creation of canonical forms that reduce sensitivity of data analysis to non-functional variations in the data; and (2) digesting of the canonical forms so that the digests are used in the comparison process. (D.I. 103 at 17) Plaintiff had argued that the combination of these limitations provided "specific improvements to computer functionality as compared to conventional approaches to comparing chip design data." (*Id.*) Ultimately, in the Section 101 motion to dismiss MO, the Court determined that claim 14's utilization of these concepts might, when considered along with the rest of the claim, plausibly amount to an inventive concept. (*Id.* at 17-19) And so the Court ruled that, at the pleading stage, there was at least a factual question on the step two issue. (*Id.*) It further noted that expert testimony regarding the scope of preemption might "be critical to a final assessment of eligibility." (*Id.* at 19)

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Now, however—and with the benefit of claim construction, discovery and Defendants'

arguments at the summary judgment stage—it is clear to the Court that these two claimed

features could not (whether considered individually or together) amount to an inventive concept.

Instead, as discussed above in Section III.A, the Court has now concluded that these features are

rightly viewed as being a part *of the abstract idea itself.* (D.I. 353 at 10; D.I. 445 at 1)[19]

At step two, Plaintiff pushes back by arguing that the "combination of the elements" of

claim 14 does constitute an inventive concept. (D.I. 409 at 13) More specifically, it lists the

following "elements" of claim 14, along with a characterization of their import:

- "design data are parsed and partitioned into constituent
  elements, such as the header and individual cells, which allows
  for a granular comparison of design files[;]" and

- "the partitioned data are organized into a syntax tree and then
  transformed into a canonical form, which reduces sensitivity to

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[19]   In the Section 101 motion to dismiss MO, the Court discussed the Federal
Circuit's decision in *Berkheimer.* In the step two portion of the Court's opinion, the Court was
assessing the two above-referenced claimed concepts: (1) creating a canonical form that reduces
sensitivity of data analysis to non-functional variations in design data; and (2) using digests in
the process of comparing data for similarities or differences. (D.I. 103 at 22-23) In doing so,
and when comparing our claim 14 to the *Berkheimer* Court's analysis of claims 4-7 in that case,
the Court explained that it was not yet convinced that dismissal was the right result. (*Id.* at 20-
24)

Now, however, the Court concludes that *Berkheimer* cannot help Plaintiff here. (D.I. 445
at 5 n.3) This is in part due to the different way that Defendants have articulated the relevant
abstract idea at issue (i.e., to now include the concept of digesting) via these Motions. And it is
also due to how the record (including the Court's issuance of the claim construction MO) has
matured since the time of the Section 101 motion to dismiss MO.

As a result, the Court is now convinced that *Berkheimer*'s step two analysis of claims 4-7
is not relevant to the step two process in this case. That is because Defendants have now
sufficiently explained why, at *step one*, claim 14's limitations that create certain canonical forms
and digest and store those canonical forms simply amount to the invocation of *multiple different
abstract ideas.* (D.I. 353 at 10) And because that is so, it is now evident to the Court that those
concepts (either considered individually or in combination) cannot themselves amount to the
requisite "something more" at *Alice*'s step two stage.

> non-functional variation at the cell level, allowing for more accurate comparisons as compared to conventional differencing tools[;]" and

- "[t]he canonical forms are then digested and stored in memory, allowing for more efficient comparisons, which is particularly important when comparing large chip design files[.]"

(D.I. 409 at 13-14 (citing D.I. 421, ex. 1 at ¶¶ 91-92, 94)) But this articulation of the inventive concept largely just restates the relevant abstract idea itself: analyzing (parsing, standardizing, digesting, and comparing) data to identify similarities and/or differences. (D.I. 445 at 4-5) It is well settled that "a claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept." *BSG Tech. LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018); *see also, e.g.*, *Simio*, 983 F.3d at 1363-64; *Teradata Corp. v. SAP SE*, 570 F. Supp. 3d 810, 859 (N.D. Cal. 2021) ("[I]f the only alleged unconventional feature is the abstract idea itself, summary judgment is appropriate.").

At step two, the Court must consider what else remains in the claims *aside* from the abstract idea. *BSG Tech. LLC*, 899 F.3d at 1290. And all that remains here are generic, conventional computer components or data structures that are utilized in a routine way. For example, Plaintiff again highlights the fact that claim 14 requires the parsing of data into "a hierarchical syntax tree structure[.]" (D.I. 409 at 14; *see also* Tr. at 141) But Plaintiff does not claim to have invented syntax trees. ('545 patent, col. 75:56-57 ("The canonical forms may be maintained in one or more syntax trees[.]"); *id.*, col. 80:2-3 ("For partitioning options, the parser . . . creates one or more syntax trees . . . that partition the design data as desired."); Tr. at 96) And the Federal Circuit has squarely held that the use of a conventional, generic data structure (such as a syntax tree) "do[es] not sufficiently transform the abstract concept into a patentable

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invention under step two." *Cap. One Fin. Corp.*, 850 F.3d at 1341-42; *see also BSG Tech. LLC*, 899 F.3d at 1291 ("Although BSG Tech narrowed its claims to specific database structures, those structures are well-understood and conventional. Such narrowing does not supply an inventive concept").[20]

Plaintiff makes a few other step two arguments, which the Court will address below. None are successful.

Plaintiff seems to argue that claim 14 can be saved at step two because it utilizes the ineligible abstract concept to analyze "*chip data*" (as opposed to some other kind of data). (*See* D.I. 409 at 13 (emphasis added)) But that cannot be so. Claims that cover no more than the "application of a generally understood technology to a specific type of data" (here, chip design data) do not contain an inventive concept sufficient to avoid ineligibility at step two. *RDPA, LLC v. Geopath, Inc.*, 543 F. Supp. 3d 4, 23 (S.D.N.Y. 2021); *see also, e.g.*, *Elec. Power Grp.*,

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[20] Plaintiff also specifically addresses three additional claims at step two. (D.I. 409 at 15) It contends that claim 1 of the '545 patent contains an inventive concept because it requires "partitioning functionally significant design data from non-significant data[.]" (*Id.*) It asserts that claim 15 of the '571 patent contains an inventive concept because it requires "parsing design data into design units with logical names[.]" (*Id.*) And it argues that claim 3 of the '545 patent contains an inventive concept because it requires "detecting functionally identical cells with different cell names" and "calculating and storing digests of functionally significant data in multiple layers of the cells in a design file and approved library[.]" (*Id.*) Yet Plaintiff provides absolutely no explanation as to *why* these claim limitations would make a difference at the step two stage. (*Id.*); *cf. Neochloris, Inc. v. Emerson Process Mgmt. LLLP*, 140 F. Supp. 3d 763, 773 (N.D. Ill. 2015) (concluding that claims beyond the representative claims did not include inventive concepts where, *inter alia*, the plaintiff "provides no explanation or citation as to why" the additional limitations in those claims were inventive). Moreover, these limitations merely describe generic data organization concepts: separating particular data from other data, providing data with names, identifying identical data with different names, and calculating and storing data. (D.I. 445 at 5; Tr. at 113-14) Plaintiff points to no record evidence suggesting otherwise. Therefore, these limitations cannot save these additional claims. *See Cap. One Fin. Corp.*, 850 F.3d at 1342 (claims reciting "routine steps of data collection and organization using generic computer components and conventional computer data processing activities" cannot satisfy the "inventive concept" requirement).

830 F.3d at 1354 ("Most obviously, limiting the claims to the particular technological environment of power-grid monitoring is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core."); *Perry St. Software, Inc. v. Jedi Techs., Inc.*, 548 F. Supp. 3d 418, 436 (S.D.N.Y. 2021) ("Just applying a series of steps that have clearly existed in other contexts to a new context (i.e., to internet chatrooms) does not transform the claims into ones that are patent eligible" at step two.).

Plaintiff next contends that claim 14 is patentable at step two because it does "not broadly preempt the field[,]" such that "data tools that do not normalize the design data into canonical forms and then hash the canonical forms are outside of the scope of the [a]sserted [c]laims." (D.I. 409 at 14) But recall that the abstract idea at issue is "analyzing (parsing, standardizing, digesting, and comparing) data to identify similarities and/or differences." So the question with regard to preemption is what amount of inventions utilizing *that idea* would fall outside of the claims' penumbra (i.e., would not be preempted)?[21] *See Alice*, 573 U.S. at 217 (noting that the focus of the preemption inquiry is on whether the claims "disproportionately t[ie] up the use *of the underlying ideas*") (emphasis added, internal quotation marks and citation omitted); *Gammino v. Am. Tel. & Tel. Co.*, 127 F. Supp. 3d 264, 274 (D. Del. 2015) (same); Tr. at 115). And the record evidence indicates that the answer to this question here is: "Not very many." The claimed invention would appear to preempt large categories of devices or methods that standardize design data and remove non-functional variations (even the mere elimination of

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[21] Similarly, Plaintiff's expert, Dr. Paul Min, opines that the asserted claims are patent eligible because they do not "broadly preempt the general idea of *comparing designs*." (D.I. 354, ex. 7 at ¶ 899 (emphasis added); *see also* Tr. at 140) But as Defendants note, this misses the point. There is no assertion here that the claims are directed to (or that the abstract idea encompasses) simply "comparing designs." (D.I. 353 at 11; Tr. at 115)

white space), and then assign a hash value to the canonical forms. (D.I. 353 at 11; *see also* D.I. 354, ex. 6 at ¶ 912 (Defendants' expert Dr. Massoud Pedram opining that the asserted claims would "preempt large swaths of technology" such as any tools that "use . . . pattern matching"); D.I. 354, ex. 8 at ¶ 534) And even if the claims do not completely preempt the relevant field, "the absence of complete preemption does not demonstrate patent eligibility." *Intell. Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1321 (Fed. Cir. 2016) (internal quotation marks and citation omitted); *see also Gammino*, 127 F. Supp. 3d at 274.

Lastly, Plaintiff argues that other material factual disputes preclude summary judgment. And it cites in support to other portions of opinions provided by its expert, Dr. Min. (Tr. at 118-20; D.I. 409 at 15)

Some of Plaintiff's and Dr. Min's assertions here have to do with evidence of long-felt need, industry praise, the improvements of the asserted claims over conventional technology and preemption. (D.I. 409 at 15; Tr. at 142-43) The Court has already explained why Plaintiff's evidence of objective indicia of non-obviousness and preemption do not warrant denial of the Motions. *See Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325-26 (Fed. Cir. 2016) ("The mere existence in the record of dueling expert testimony does not necessarily raise a genuine issue of material fact" regarding the Section 101 inquiry). And to the extent that Plaintiff's expert evidence addresses other matters, it is also not helpful to Plaintiff's cause at step two. This is so for a few different reasons.

For one thing, some of Dr. Min's opinions are not tied to claim 14's *requirements*. For example, he opines that the asserted claims made it possible for the first time to "computationally verify and validate the integrity, origin, and meaningful equivalency of chip designs and identify and analyze changes, and to do so efficiently and reliably even if they were expressed in

different languages, created using different tools, or written in the same language but described using different functional, electrical, or geometric expressions." (D.I. 421, ex. 1 at ¶ 94; *see also id.* at ¶ 896 ("[T]he application of the concepts of the Asserted Claims to the specific problems of comparing design files that could be expressed in different formats and in different ways itself was inventive."); *see also* Tr. at 125 (Plaintiff's counsel explaining that the problem that the invention is solving is design data "being in different languages. That's how these claims set out the specific ordering of these steps on what you have to do in order to account for these differences."); *id.* at 137 (same)) But claim 14 does not *require* that the design data be expressed in "different languages" or be described using "different expressions." Again, all that is required is that the claimed canonical forms reduce *any* type of non-functional variation, such as by eliminating extra white space. (Tr. at 145-47); *see Q Techs., Inc. v. Walmart, Inc.*, 6:21-CV-00779-ADA, 2024 WL 1146150, at *6 (W.D. Tex. Mar. 6, 2024) (rejecting the plaintiff's argument that there was a factual issue with respect to step two, because the plaintiff's expert opined that the claimed invention resulted in an improved flow of information in a closed content sharing system, and yet the claims were not limited to such a system); *cf. ZapFraud, Inc. v. FireEye, Inc.*, Civil Action No. 19-1688-CFC, 2020 WL 6822972, at *6 n.7 (D. Del. Nov. 20, 2020) (explaining why, in assessing eligibility questions, a court must evaluate the claim by focusing on its broadest or least specific permutations) (citing cases).

Other of Dr. Min's opinions fail to create an issue of fact because they "misunderstand[] the law." (D.I. 353 at 11) A premise of Dr. Min's opinion that the claims include inventive concepts is that the claimed techniques "are novel and non-obvious, and therefore, not conventional or routine[.]" (D.I. 421, ex. 1 at ¶ 896; *see also* Tr. at 124) But it is well-settled that "'it is not enough for eligibility' that the techniques claimed are 'groundbreaking,

innovative, or even brilliant' or 'novel and nonobvious in light of prior art.'" *Eagle View Techs., Inc. v. Roofr, Inc.*, 651 F. Supp. 3d 729, 740 (D. Del. 2023) (quoting *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018)); *see also* (Tr. at 152-53).

Beyond that, Dr. Min's opinions rely on the abstract ideas themselves and on generic data structures in order to assert that such features amount to an inventive concept. (D.I. 421, ex. 1 at ¶ 897) This does not create a material fact issue at step two. *See Ceiva Opco, LLC v. Amazon.com, Inc.*, Case No. 2:22-cv-02709-AB-MAA, 2024 WL 1728660, at *10 (C.D. Cal. Mar. 4, 2024) (explaining that the expert's eligibility opinions did not create a fact issue because they just confirmed that the abstract idea was unconventional, and the ineligible concept cannot supply the inventive concept). Dr. Min further opines that the asserted claims are eligible at step two because they "provide tangible benefits in reliability, efficiency, automation, and cost savings[.]" (D.I. 421, ex. 1 at ¶ 898; *see also id.* at ¶ 94 (Dr. Min noting that the claims "enabled for the first time the *automatic* verification" of chip design data in various ways) (emphasis added)) But again, even if that is all true, it cannot help Plaintiff. Claims that simply allow for more efficient implementation of an abstract idea, or that only allow for the speeded-up automation of work that humans otherwise could do much more slowly, do not provide a sufficient inventive concept. *Chewy, Inc. v. Int'l Bus. Mach. Corp.*, 94 F.4th 1354, 1367 (Fed. Cir. 2024); *see also* (Tr. at 123, 149).

In sum, because the record indicates no inventive concept in the asserted claims, the claims fail *Alice*'s step two and are thus patent ineligible. *See Berkheimer*, 881 F.3d at 1368 ("When there is no genuine issue of material fact regarding whether the claim element or claimed combination is well-understood, routine, [and] conventional to a skilled artisan in the

relevant field, this [Section 101] issue can be decided on summary judgment as a matter of law.").

IV. CONCLUSION

For the foregoing reasons, the Court GRANTS the Motions.

An appropriate Order will issue.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

OASIS TOOLING, INC.,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action No. 22-151-CJB
	)	
SIEMENS INDUSTRY SOFTWARE, INC.,	)	
	)	
Defendant.	)	
	)	
OASIS TOOLING, INC.,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action No. 22-312-CJB
	)	
GLOBALFOUNDRIES U.S., INC.,	)	
	)	
Defendant.	)	

ORDER

At Wilmington, Delaware this **2nd** day of **July, 2024**;

For the reasons stated in the Memorandum Opinion issued this same date, IT IS
HEREBY ORDERED that the motions for summary judgment of patent ineligibility under 35
U.S.C. § 101 filed by Defendant Siemens Industry Software, Inc. and Defendant
GlobalFoundries U.S. Inc. pursuant to Federal Rule of Civil Procedure 56, (Civil Action No. 22-
151-CJB, D.I. 237; Civil Action No. 22-312-CJB, D.I. 352), are GRANTED.

Christopher J. Burke
Christopher J. Burke
UNITED STATES MAGISTRATE JUDGE