

In the United States Court of Federal Claims

No. 11-130C

(Filed: April 6, 2022)

_____)	Patent infringement case; persuasive, but
RETURN MAIL, INC.,)	not precedential, effect of prior decision
)	of the Federal Circuit that was reversed by
Plaintiff,)	the Supreme Court on jurisdictional
)	grounds; patent-eligibility under 35
v.)	U.S.C. § 101
)	
UNITED STATES,)	
)	
Defendant.)	
_____)	

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OPINION AND ORDER

LETTOW, Senior Judge.

Pending before the court in this patent infringement case are the United States' ("the government" or "defendant") motions for summary judgment under 35 U.S.C. §§ 101, 102, and 305 and Return Mail, Inc.'s ("plaintiff" or "Return Mail") cross-motions for partial summary judgment under 35 U.S.C. §§ 101 and 305. *See* ECF Nos. 169, 171-73. At issue are claims 42 and 44 of U.S. Patent No. 6,826,548 (the "'548 patent"), titled "System and Method for Processing Returned Mail," and the reexamination certificate for the '548 patent. The '548 patent claims a "technological invention improving the manner in which undeliverable mail is identified and processed." Pl.'s § 101 Summ. J. Mot. at 1 ("Pl.'s § 101 Mot."), ECF No. 172. Defendant argues that claims 42 and 44 are not valid claims because (1) they address patent-ineligible subject matter under 35 U.S.C. § 101, *see* Def.'s § 101 Summ. J. Mot. at 1 ("Def.'s § 101 Mot."), ECF No. 169, (2) the claims are anticipated by prior art under 35 U.S.C. § 102, and (3) the reexamined claims are broader than the original claims of the '548 patent in contravention of 35 U.S.C. § 305, *see* Def.'s §§ 102, 305 Summ. J. Mot. at 1 ("Def.'s §§ 102, 305 Mot."), ECF No. 171.

In turn, plaintiff opposes summary judgment under Sections 101, 102, and 305. *See* Pl.’s Opp’n to Def.’s § 101 Mot. (“Pl.’s § 101 Opp’n”), ECF No. 175; Pl.’s Opp’n to Def.’s § 102 Mot. (“Pl.’s § 102 Opp’n”), ECF No. 179; Pl.’s Opp’n to Def.’s § 305 Mot. (“Pl.’s § 305 Opp’n”), ECF No. 178. Return Mail also cross-moves for summary judgment as to two of the government’s affirmative defenses, arguing that the claims are valid under Section 101 and have not been impermissibly expanded under Section 305. *See* Pl.’s § 101 Mot.; Pl.’s § 305 Summ. J. Mot. (“Pl.’s § 305 Mot.”), ECF No. 173. The parties have completed briefing. *See* Def.’s § 101 Opp’n, ECF No. 177; Def.’s § 305 Opp’n, ECF No. 180; Pl.’s § 101 Reply, ECF No. 184; Pl.’s § 305 Reply, ECF No. 183. Def.’s § 101 Reply, ECF No. 182; Def.’s §§ 102, 305, Reply, ECF No. 186. The court held a hearing on January 24, 2022, and supplemental briefs by the parties were filed on February 4 and 16, 2022. *See* Pl.’s Supp. Br. § 101, ECF No. 207; Def.’s Supp. Br. § 101, ECF No. 206. The motions are ready for disposition.

For the reasons stated, the court grants defendant’s motion for summary judgment on the ground that it has established that claims 42 and 44 of the ’548 patent are invalid under 35 U.S.C. § 101 and denies plaintiff’s cross-motions for partial summary judgment.

BACKGROUND¹

A. The ’548 Patent

The application for the ’548 patent was filed on January 24, 2002, and the patent issued November 30, 2004. *See* ’548 patent. The patent describes a “method, system and program product for processing returned mail.” *Id.*² Return Mail is the assignee of the ’548 patent. *Id.* The patent underwent ex parte reexamination, which resulted in the original thirty-eight claims being cancelled and claims 39-63 being added. *See* Ex Parte Reexamination Certificate 6,826,548 (Jan. 4, 2011).³ Claims 39-63, which will be presented in greater detail as relevant below, do not mirror the original claims of the patent word for word. *Compare* ’548 patent, *with* Ex Parte Reexamination Certificate 6,826,548; *see also* Def.’s §§ 102, 305 Mot. at 5-14.

The claimed invention aims to provide an “improved method of processing returned mail that overcomes the historical problems with prior art manual handling.” ’548 patent, col. 1, lines 55-57. Essentially, the patent addressed an automated process that had previously required manual entry by humans. *See* Pl.’s § 101 Mot. at 9. The invention encodes information from the sender, such as the name and address of the recipient, into a two-dimensional barcode. *See* ’548

¹ The following recitations do not constitute findings of fact by the court. Instead, the recited factual elements are taken from the relevant complaint and the parties’ briefs and attached appendices.

² “Returned mail” is sometimes referred to as “undeliverable mail,” which means “mail that is not delivered due to an inaccurate or expired address for the intended recipient.” Pl.’s § 101 Mot. at 8.

³ References to the ’548 patent throughout this opinion include the Ex Parte Reexamination Certificate.

patent, col. 2, lines 4-5; col. 2, line 66 to col. 3, line 15. If undeliverable, the mail is sent to a processing location where the barcode is scanned, and the encoded information is decoded. *Id.*, col. 2, lines 14-20; col. 3, lines 15-51. The computer system which stores the encoded information interacts with a database of stored corrected addresses via “any conventional telecommunications data line.” *Id.*, col. 3, lines 53-54. Afterwards, depending on what the sender elected, either a corrected address is provided if available or a notification is sent to the sender if they did not request a corrected address. *See* ’548 Reexamination Certificate, col. 2, lines 1-24.

For purposes of the present litigation, Return Mail only asserts claims 42 and 44, which cover:

42. A method for processing a plurality of undeliverable mail items, comprising:

receiving from a sender a plurality of mail items, each including i) a written addressee, and ii) encoded data indicating whether the sender wants a corrected address to be provided for the addressee;

identifying, as undeliverable mail items, mail items of the plurality of mail items that are returned subsequent to mailing as undeliverable;

decoding the encoded data incorporated in at least one of the undeliverable mail items;

creating output data that includes a customer number of the sender and at least a portion of the decoded data;

determining if the sender wants a corrected address provided for intended recipients based on the decoded data;

if the sender wants a corrected address provided, electronically transferring to the sender information for the identified intended recipients that enable the sender to update the sender’s mailing address files; and

if the sender does not want a corrected address provided, posting return mail data records on a network that is accessible to the sender to enable the sender to access the records.

44. The method of claim 42, wherein the encoded data further indicates a name and address of the intended recipient.

’548 Reexamination Certificate, col. 2, lines 1-24, 30-32.

B. Procedural History

In 2003, the parties began discussing whether the Postal Service would obtain a license for the '548 patent. Am. Compl. ¶¶ 10-15, ECF No. 128. In 2006, the Postal Service introduced the OneCode ACS system, which creates a “[t]racking [b]arcode” for mail and allows a barcode reader to “determine data usually obtained from the mailpiece as keyed data entry or [o]ptical [c]haracter [r]eader . . . produced data.” Pl.’s § 101 Mot., Ex. 6 at 34. When the parties could not reach an agreement as to the licensing of the '548 patent, Return Mail filed suit against the government in February 2011, alleging that the OneCode ACS system infringes the patent. *See* Compl., ECF No. 1.

The court issued its opinion on claim construction on October 4, 2013. *See* ECF No. 54. In April of 2014, the Postal Service petitioned the Patent Trial and Appeal Board (“the PTAB”) for a covered business method (“CBM”) review of the '548 patent. This case was stayed during that process. *See* Order of October 21, 2014, ECF No. 83. The PTAB invalidated all the challenged claims of the '548 patent and reexamination certificate, determining that the claims were patent-ineligible under 35 U.S.C. § 101. Specifically, the PTAB held that the claims “more likely than not” covered patent-ineligible subject matter. *United States Postal Serv. v. Return Mail, Inc.*, No. CBM2014-00116, 2014 WL 5339212 at *13-15 (P.T.A.B. October 16, 2014).

On appeal, the Court of Appeals for the Federal Circuit affirmed the PTAB’s invalidity decision after initially determining that the Postal Service had standing to petition for review by the PTAB. *Return Mail, Inc. v. United States Postal Serv.*, 868 F.3d 1350, 1366-69 (Fed. Cir. 2017), *rev’d*, ___ U.S. ___, 139 S. Ct. 1853 (2019). The Federal Circuit reasoned that claims 42 and 44 were abstract as they “simply recite existing business practice with the benefit of generic computing technology.” *Id.* at 1368. In that respect, the Federal Circuit determined that the “claims only recite routine, conventional activities such as identifying undeliverable mail items, decoding data on those mail items, and creating output data” and therefore did not find an inventive concept that transformed the abstract idea into a patent-eligible application. *Id.* at 1368-69.

The United States Supreme Court granted certiorari but only as to the issue of “whether a federal agency is a ‘person’ able to seek [CBM] review under the [Leahy-Smith America Invents Act of 2011].” *Return Mail*, 139 S. Ct. at 1859. The case was reversed and remanded because a federal agency was held to not be a “person” for the purposes of the Act and could not seek CBM review. *Id.* at 1867-68. Of note is that the Supreme Court did not reach the substantive issue of whether the '548 patent was invalid under Section 101. The Federal Circuit then remanded the case to the PTAB “with instructions to dismiss in light of the Supreme Court’s disposition.” *Return Mail, Inc. v. United States Postal Serv.*, 774 Fed. Appx. 684 (Fed. Cir. 2019).

With the PTAB related proceedings thus concluded, the stay in this case was lifted in September 2019. *See* Order of September 5, 2019, ECF No. 108. Now in this court, defendant renews its argument that the '548 patent is invalid under Section 101, as well as under Sections 102 and 305. *See* Def.’s § 101 Mot. at 26-27; Def.’s §§ 102, 305 Mot. at 5, 14. Contrastingly, plaintiffs seek partial summary judgment rejecting these affirmative defenses on the grounds that the patent is valid as an inventive concept, that the government failed to adequately support its

contentions of invalidity, and that the patent was not impermissibly broadened during the reexamination process. *See* Pl.’s § 101 Mot. at 1, 27-28; Pl.’s § 305 Mot. at 2.

STANDARDS FOR DECISION

A. 28 U.S.C. § 1498

Pursuant to 28 U.S.C. § 1498, the United States has waived sovereign immunity and granted this court exclusive jurisdiction to adjudicate patent infringement claims against the federal government “[w]henever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same.” *See FastShip, LLC v. United States*, 892 F.3d 1298, 1307 n.1 (Fed. Cir. 2018), *aff’g*, 122 Fed. Cl. 71, 78 (2015) (recognizing that Section 1498 grants this court jurisdiction over patent infringement claims against the United States); *Hitkansut LLC v. United States*, 130 Fed. Cl. 353, 367 (2017), *aff’d*, 721 Fed. Appx. 992 (Fed. Cir. 2018). Moreover, the statute provides that “the use or manufacture of an invention described in and covered by a patent of the United States by a contractor, a subcontractor, or any person, firm, or corporation for the [g]overnment and with the authorization or consent of the [g]overnment, shall be construed as use or manufacture for the United States.” 28 U.S.C. § 1498(a). Such an unauthorized “use or manufacture of an invention” under Section 1498(a) is analogous to a taking of property under the Fifth Amendment of the United States Constitution. *See Motorola, Inc. v. United States*, 729 F.2d 765, 768 (Fed. Cir. 1984). The government’s “taking” of a nonexclusive and compulsory license to any United States patent occurs “as of the instant the invention is first used or manufactured by [or for] the [g]overnment.” *Decca Ltd. v. United States*, 640 F.2d 1156, 1166 (Ct. Cl. 1980).

The government has waived sovereign immunity only for the compulsory taking of a non-exclusive patent license, and the government’s liability under 28 U.S.C. § 1498 diverges from private liability under 35 U.S.C. § 271:

Government liability under Section 1498 arises from the “use or manufacture by or for the United States.” There is no mention of liability for a “sale” to the United States of a device covered by a patent. In contrast, with respect to private liability for patent infringement, the “sale” of a patented device is specifically defined in 35 U.S.C. § 271 as an act of infringement.

de Graffenried v. United States, 25 Cl. Ct. 209, 215 (1992) (brackets omitted); *compare* 28 U.S.C. § 1498, *with* 35 U.S.C. § 271.⁴

⁴ Section 271(a) of Title 35 of the United States Code provides in relevant part:

whoever without authority *makes, uses, offers to sell, or sells* any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.

B. Available Defenses

Under Section 1498(a), “[i]n the absence of a statutory restriction, *any defense* available to a private party is equally available to the United States.” *Motorola*, 729 F.2d at 769 (quoting 28 U.S.C. § 1498, Revisor’s Notes) (emphasis added). Thus, the invalidity defenses available to private parties involved in patent disputes under 35 U.S.C. § 282(b) are also available to the government. *See, e.g., Messerschmidt v. United States*, 29 Fed. Cl. 1, 17-40 (1993) (granting the government’s cross-motion for summary judgment in plaintiff’s patent infringement suit, having found plaintiff’s patent invalid on the basis of anticipation, indefiniteness, and obviousness), *aff’d*, 14 F.3d 613 (Fed. Cir. 1993). Nonetheless, an issued patent is presumed valid, 35 U.S.C. § 282(a), and the government must prove invalidity by clear and convincing evidence, *Microsoft Corp. v. i4i Ltd. P’ship*, 564 U.S. 91, 95 (2011). This burden of persuasion remains on the government throughout a pending action, *see Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1534 (Fed. Cir. 1983), including for summary judgment, *see Anderson v. Liberty Lobby*, 477 U.S. 242, 254 (1986) (holding that when deciding a motion for summary judgment, a court must bear in mind the applicable evidentiary burden under the substantive law).

C. Summary Judgment

A grant of summary judgment is appropriate when the pleadings, affidavits, and evidentiary materials filed in a case demonstrate that “there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Rule 56(a) of the Rules of the Court of Federal Claims (“RCFC”). A fact is material if it “might affect the outcome of the suit under the governing law.” *Anderson*, 477 U.S. at 248. A dispute is genuine if it might “return a verdict for the nonmoving party.” *Id.* If “the record taken as a whole [cannot] lead a rational trier of fact to find for the non-moving party, there is no ‘genuine issue for trial,’” and summary judgment is appropriate. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986) (quoting *First Nat. Bank of Ariz. v. Cities Serv. Co.*, 391 U.S. 253, 288 (1968)).

The burden of demonstrating the absence of any genuine dispute is on the moving party. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). Accordingly, “the inferences to be drawn from the underlying facts must be viewed in the light most favorable to the party opposing the motion.” *Matsushita*, 475 U.S. at 587-88 (alteration omitted) (quoting *United States v. Diebold, Inc.*, 369 U.S. 654, 655 (1962)). The nonmoving party may defeat summary judgment by presenting material facts of its own, more than “[m]ere denials or conclusory statements,” that indicate “an evidentiary conflict created on the record.” *Barmag Barmer Maschinenfabrik AG v. Murata Mach., Ltd.*, 731 F.2d 831, 836 (Fed. Cir. 1984). To establish “that a fact cannot be or is genuinely disputed,” a party must “cit[e] to particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations (including those made for purposes of the motion only), admissions, interrogatory answers, or other materials.” RCFC 56(c)(1)(A).

When both parties have moved for summary judgment, “the court must evaluate each party’s motion on its own merits, taking care in each instance to draw all reasonable inferences

35 U.S.C. § 271(a) (emphasis added).

against the party whose motion is under consideration.” *Mingus Constructors, Inc. v. United States*, 812 F.2d 1387, 1391 (Fed. Cir. 1987). “The fact that both parties have moved for summary judgment does not mean that the court must grant judgment as a matter of law for one side or the other.” *Id.* “To the extent there is a genuine issue of material fact, both motions must be denied.” *Marriott Int’l Resorts, L.P. v. United States*, 586 F.3d 962, 969 (Fed. Cir. 2009).

ANALYSIS

The parties’ cross-motions for summary judgment address whether the ’548 patent is ineligible under 35 U.S.C. § 101. “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. Pursuant to Supreme Court precedent construing 35 U.S.C. § 101, “[l]aws of nature, natural phenomena, and abstract ideas” are ineligible subject matters for patent protection. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (quoting *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589-90 (2013)).⁵ Under the Supreme Court’s two-part test to determine patent eligibility, a court must (1) “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” and (2) if so, “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 78-79 (2012)). The second step has been characterized as “a search for an ‘inventive concept’” that “amounts to significantly more than a patent on” the abstract idea. *Id.* (quoting *Mayo*, 566 U.S. at 72-73); see also *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1146 (Fed. Cir. 2016).

A. Alice Step One

“The ‘abstract ideas’ category [of patent-ineligible concepts] embodies ‘the longstanding rule that an idea of itself is not patentable.’” *Alice*, 573 U.S. at 218 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)) (internal quotation marks and brackets omitted). At step one of the *Alice* analysis, the court inquires “whether the claims ‘focus on a specific means or method or are instead directed to a result or effect that itself is the abstract idea and merely invokes generic processes and machinery.’” *Secured Mail Sols. LLC v. Universal Wilde, Inc.*, 873 F.3d 905, 909 (Fed. Cir. 2017) (internal alterations omitted) (quoting *McRO Inc. v. Bandai Namco Games America, Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016)).

While there is no “definitive rule to determine what constitutes an abstract idea,” the Federal Circuit has “held claims ineligible as directed to an abstract idea when they merely collect electronic information, display information, or embody mental processes that could be performed by humans.” *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1346-47 (Fed. Cir. 2017) (quotation marks omitted). Various abstract or conceptual subject matters have proven to

⁵ These three categories of ineligible subject matter are judicially created. See *Hitkansut LLC v. United States*, 115 Fed. Cl. 719, 723 (2014), *aff’d*, 721 Fed. Appx. 992 (Fed. Cir. 2018).

be patent-ineligible abstract ideas under 35 U.S.C. § 101. *See, e.g., Alice*, 573 U.S. at 219 (holding patent ineligible “a method of exchanging financial obligations between two parties using a third-party intermediary to mitigate settlement risk,” which embodied the abstract idea of intermediated settlement); *Benson*, 409 U.S. at 71-72 (holding patent-ineligible an algorithm for converting binary-coded decimal numerals into pure binary form, as it was “in practical effect . . . a patent on the algorithm itself”); *Parker v. Flook*, 437 U.S. 584, 594-95 (1978) (holding patent-ineligible a mathematical formula for computing “alarm limits” in a catalytic conversion process). On the other hand, “specific improvements in technology, method, or material that make more useful concepts, ideas, or materials are patent eligible.” *3rd Eye Surveillance, LLC v. United States*, 140 Fed. Cl. 39, 52 (2018) (citing *Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1048-49 (Fed. Cir. 2016) (holding that a “new and useful laboratory technique for preserving [a type of liver cell]” was patent-eligible subject matter); *see also Hitkansut*, 130 Fed. Cl. at 380 (holding patent-eligible a “new and more efficient method for treating metal parts to change their physical properties”).

Invoking computers or other technologies to make an abstract idea more efficient is neither a “new and useful process, machine, manufacture, or composition of matter,” nor a “new and useful improvement thereof” under 35 U.S.C. § 101. For example, *Secured Mail Solutions* concerned claims involving “methods whereby a sender affixe[d] an identifier on the outer surface of a mail object . . . before the mail object [was] sent . . . [, and c]omputers and networks [were] used to communicate the information about the mail object’s contents and its sender after the mail object [was] delivered.” 873 F.3d at 907. Specifically, the *Secured Mail Solutions* patents involved affixing a barcode, a QR code, or a personalized URL to the outside of mail items. *Id.* The Court of Appeals held that the claims in that case were directed to an abstract idea because the claims were “not directed to a new barcode format, an improved method of generating or scanning barcodes, or similar improvements in computer functionality.” *Id.* at 910. The claims lacked any description of how the identifiers were generated or were different from conventional means of communicating mail item information, such as affixing a return address. *Id.* Moreover, the claims were “not limited by rules or steps that establish[ed] how the focus of the methods [was] achieved.” *Id.* at 911. Instead, they concerned the abstract idea of “using a marking affixed to the outside of a mail object to communicate information about the mail object.” *Id.*; *see also Credit Acceptance Corp. v. Westlake Sers.*, 859 F.3d 1044, 1054-1056 (Fed. Cir. 2017) (holding patent claims abstract where they involved electronic “communication between previously unconnected systems—the dealer’s inventory database, a user credit information input terminal, and creditor underwriting servers”—because doing so merely automated the “previously manual processing of loan applications” and invoked computers “merely as a tool” instead of offering an improvement).

The government argues that Return Mail’s patent claims are abstract because “they simply take known steps involving the abstract concept of processing returned mail, and then automate those known steps.” Def.’s § 101 Mot. at 15. Defendant argues that—unlike the patent claims in *McRO*, which proved patent-eligible because they created a novel set of rules for performing lip synchronization in video games, *id.* at 14 (citing generally 837 F.3d 1299)—the ’548 patent claims recite “an ‘existing business practice with the benefit of generic computing technology,’” *id.* at 15 (quoting *Return Mail*, 868 F.3d at 1368), which “a human can mentally

perform,” *id.* at 15-16 (citing *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011)).

Return Mail responds—quoting the opinion of its expert, Dr. Scott Nettles—that the ’548 claims “are directed to specific means or methods that improve the relevant technology and are a specific and concrete invention centered on the automated processing of undeliverable mail.” Pl.’s § 101 Opp’n at 8. Plaintiff further argues that its patent claims are not directed to an abstract concept because they concern “a physical and technological process including mail pieces, sorters, scanners, encoded information and computers,” *id.*, because the ordered steps included in the claims “were not previously used as an ordered combination,” *id.* at 9, and because those steps were directed to “achiev[ing] a technological improvement in the processing of returned mail,” *id.* at 10.

As a threshold matter, the court addresses Return Mail’s assertion that the Federal Circuit’s opinion in *Return Mail*, 868 F.3d at 1368-69—and the PTAB’s underlying CBM decision—are “null and void, as if they never occurred” because the Supreme Court reversed the Court of Appeals. Pl.’s § 101 Opp’n at 3. The court agrees that the Federal Circuit’s opinion no longer has preclusive effect on the parties, *see O’Connor v. Donaldson*, 422 U.S. 563, 577 n.12 (1975) (“Of necessity our decision vacating the judgment of the Court of Appeals deprives that court’s opinion of precedential effect, leaving [the Supreme] Court’s opinion and judgment as the sole law of the case.”); however, the court disagrees with the contention that it may not consider the Federal Circuit’s opinion for its persuasive value, especially where the pertinent decision was reversed on a procedural question separate and distinct from the merits of the Court of Appeal’s eligibility analysis, *see Los Angeles Cnty. v. Davis*, 440 U.S. 625, 646 n.10 (1979) (Powell, J., dissenting) (“Although a decision vacating a judgment necessarily prevents the opinion of the lower court from being the law of the case, the expressions of the court below on the merits, if not reversed, will continue to have precedential weight and, until contrary authority is decided, are likely to be viewed as persuasive authority.” (internal citations omitted)).

Return Mail further argues that the court is prevented from considering the Federal Circuit’s opinion because of the different evidentiary standards of proof at the PTAB and this court. *See* Pl.’s § 101 Opp’n at 4. Regardless of debates over the extent to which extrinsic evidence may be appropriate in the Section 101 eligibility analysis, *see CardioNet, LLC v. InfoBionic, Inc.*, 955 F.3d 1358, 1374-79 (Fed. Cir. 2020) (Dyk, J., concurring in part and dissenting in part), it is undisputed that “*Alice* step one presents a legal question that can be answered based on the intrinsic evidence,” *id.* at 1372 (Stoll, J.); *see also In re Comiskey*, 554 F.3d 967, 975 (Fed. Cir. 2009) (“It is well-established that” invalidity under Section 101 “is a question of law.” (quoting *AT & T Corp. v. Excel Commc’ns, Inc.*, 172 F.3d 1352, 1355 (Fed. Cir. 1999))). The legal question of invalidity, at *Alice* step one, is therefore not affected by the different standards of proof applicable to factual issues. *See Microsoft*, 564 U.S. at 114 (Breyer, J., concurring) (explaining that “the evidentiary standard of proof [in a Section 101 invalidity analysis] applies to questions of fact and not to questions of law”). Moreover, to hold that PTAB decisions may not apply in trial courts due to differing standards of proof would render PTAB invalidity decisions meaningless because a disappointed patent holder would automatically have a second chance to litigate the validity question before the trial court. This cannot be, nor has it been, the case.

The court reiterates that it agrees with Return Mail to the extent that the Supreme Court’s reversal deprived the Federal Circuit’s and the PTAB’s decisions of preclusive effect. It is not true, however, that the court is therefore barred from considering those decisions. The court therefore concludes that the Federal Circuit’s reasoning in *Return Mail*, 868 F.3d at 1368-69 is worthy of consideration here.⁶

The text of the ’548 patent claims reveals a series of steps that describe an abstract idea, namely, processing returned mail and relaying mailing address data. “Claim 42 recites ‘receiving from a sender a plurality of mail items,’ ‘identifying undeliverable mail items,’ ‘decoding encoded data,’ ‘creating output data,’ and ‘determining if the sender wants a corrected address.’” *Return Mail*, 868 F.3d at 1368 (quotation marks and ellipses omitted). In considering the same ’548 patent claims at issue here, the Federal Circuit held that “[t]hese steps are analogous to the steps of ‘collecting data,’ ‘recognizing certain data within the collected data set,’ and ‘storing that recognized data in memory,’ which [it] found to be abstract” in another case. *Id.* (quoting *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014), *cert. denied*, 577 U.S. 914 (2015)). This abstractness is evident whether the court considers the claim limitations individually or as an ordered combination.

Additionally, the ’548 patent claims are not directed to an improvement on the abstract idea of processing returned mail and relaying address data. They do not offer a practitioner of the art something that had been hitherto unavailable, like the claims for a new way of performing lip synchronization in video games in *McRO*. Instead, like the claims in *Secured Mail Solutions* and *Credit Acceptance Corp.*, the ’548 claims restate a process that was historically performed manually by people and invokes computers merely as a tool to automate that previously manual process. *See* ’548 Patent, col. 1, lines 39-47. Contrary to Return Mail’s contention that claims 42 and 44 are directed to a specific improvement of processing returned mail and relaying address data, the texts of those claims do not describe any such improvement individually or as an ordered combination. Instead, they recite the conventional, historically manual processing of returned mail and updating addresses while invoking computers “merely as a tool.” *Credit Acceptance Corp.*, 859 F.3d at 1055.

⁶ Return Mail also argues that the PTAB’s and the Federal Circuit’s opinions are inapplicable to the present motions because the PTAB used a different claim construction standard than would be used at the trial court. Pl.’s § 101 Opp’n at 4. Prior to November 2018, the PTAB applied the “broadest reasonable interpretation” standard to claim construction in various proceedings, including CBM reviews; however, in a final agency rulemaking, the Board adopted the same claim construction standard used in trial courts as set out in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). *See* Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (to be codified at 37 C.F.R. pt. 42). This rulemaking was made to apply only to covered PTAB proceedings filed on or after November 13, 2018. *Id.* The CBM review at issue in this case was filed before the effective date of the final PTAB rulemaking. *See Return Mail, Inc.*, No. CBM2014-00116.

While plaintiff argues that tangible items, such as computers and scanners, remove claims 42 and 44 from the realm of abstract ideas, *see* Pl.’s § 101 Opp’n at 8, such tangible instruments do not appear in claims 42 and 44, *see Return Mail*, 868 F.3d at 1369 (“In addition, Return Mail points to hardware, such [as] ‘a mail sorter, optical scanner, databases, application servers, and the mail itself’ to argue that claims 42–44 result in an ‘improvement to an existing technological process.’ However, those limitations do not appear in the subject claims; instead, the claims focus only on encoding and decoding certain information and placing that information over a network.” (internal citations omitted)). Whatever may be said for other claims in the ’548 patent that Return Mail no longer asserts,⁷ claims 42 and 44 are lacking in any references beyond the abstract idea of processing undeliverable mail items. Moreover, even if claims 42 and 44 described a “physical and technological process including mail pieces, sorters, scanners, encoded information and computers,” Pl.’s § 101 Opp’n at 8, this would amount to an abstract idea “for which computers [and these other pieces of technology] are invoked merely as a tool.” *Credit Acceptance Corp.*, 859 F.3d at 1055. As with *Secured Mail Solutions*, these implements would render the abstract idea of relaying address information on returned mail items more efficient but would not render that idea “less abstract.” 873 F.3d at 910. The court therefore holds that the asserted ’548 patent claims are directed to an abstract idea.

B. Alice Step Two

That the ’548 claims are directed to an abstract idea does not end the analysis, and the court considers whether those claims embody an inventive application of processing mail items and updating a return address that is “significantly more” than just that abstract idea. *See Alice*, 573 U.S. at 217-18. To prevail at step two of *Alice*, the ’548 claims “must involve more than performance of ‘well-understood, routine, and conventional activities previously known to the industry.’” *Content Extraction*, 776 F.3d at 1347-48 (brackets omitted) (quoting *Alice*, 573 U.S. at 225). Whether the ’548 claims embody a patent-eligible application of an abstract idea is a question of law; however, whether the claims at issue involve more than well-understood, routine, and conventional activities is a factual question. *See Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018). “When there is no genuine issue of material fact regarding whether the claim element or claimed combination is well-understood, routine, [or] conventional to a skilled artisan in the relevant field, this issue can be decided on summary judgment as a matter of law.” *Id.*

In the context of computer-based claims, the Court in *Alice* explained:

In *Benson*, . . . we considered a patent that claimed an algorithm implemented on “a general-purpose digital computer.” Because the algorithm was an abstract idea, the claim had to supply a “‘new and useful’” application of the idea in order to be patent eligible. But the computer implementation did not supply the necessary inventive concept; the process could be “carried out in existing computers long in use.”

573 U.S. at 222 (internal citations omitted). The Court continued,

⁷ “The Court: Plaintiff’s claims . . . focus specifically and solely . . . on claims 42 and 44 of the patent. Is that correct? [Counsel for Return Mail]: Yes, Your Honor.” *See* Hr’g Tr. 11:6-11 (Jan. 21, 2021).

In *Diehr*, by contrast, we held that a computer-implemented process for curing rubber was patent eligible, but not because it involved a computer. The claim employed a “well-known” mathematical equation, but it used that equation in a process designed to solve a technological problem in “conventional industry practice.” The invention in *Diehr* used a “thermocouple” to record constant temperature measurements inside the rubber mold—something “the industry had not been able to obtain.”

Id. at 223 (brackets and internal citations omitted).

Similarly, the abstract idea of processing undeliverable mail items and providing an updated address is not patent eligible on its own. Nevertheless, Return Mail may prevail by demonstrating a genuine issue of material fact as to whether its claimed method goes beyond generically applying the idea on computers, as in *Benson*, and instead applies it in an inventive way to provide some improvement or novel solution as in *Diehr*. See *Hitkansut*, 115 Fed. Cl. at 732 (“In *Diehr*, the underlying mathematical equation that determined at what point in the process a rubber mold should be opened was not patent eligible, but a method for applying that equation more accurately and effectively was eligible.” (citing *Diehr*, 450 U.S. at 187)); see also, e.g., *Thales Visionix*, 850 F.3d at 1349 (“Just as claims directed to a new and useful technique for defining a database that runs on general-purpose computer equipment are patent eligible, so too are claims directed to a new and useful technique for using sensors to more efficiently track an object on a moving platform.” (internal citation omitted)).

The government contends that the ’548 patent claims fail to provide an “inventive concept” under *Alice* step two because they “tak[e] known and conventional business practices (e.g., steps for sorting returned mail) and generically apply[] those practices to computers.” Def.’s § 101 Mot. at 16-17. Defendant specifically argues that Return Mail’s claims lack limitations directed to an inventive concept: e.g., that according to plaintiff’s expert, “elements of the claims were routine, conventional, and well-understood” at the time of Return Mail’s application, *id.* at 18 (citing Return Mail’s expert, Dr. Scott Nettles), that encoding and decoding data based on whether a sender wants an updated address “amount to a basic logic determination” and do not “transform the abstract idea into patent-eligible subject-matter,” *id.* (quoting *Return Mail*, 868 F.3d at 1368-69), that Return Mail’s invocation of computers fails to provide the inventive concept because the ’548 patent says “any kind of computer system” would suffice, *id.* at 20 (brackets omitted) (citing ’548 Patent, col. 7, line 7), and that other tangible technologies that Return Mail identifies in its argument are not found in the disputed claims 42 and 44, *id.*

Return Mail concedes that some of the limitations of claim 42 were known at the time of the ’548 patent application; however, it contends that none of them were well-known, routine, and conventional. Pl.’s § 101 Opp’n at 12-15. Plaintiff further avers that limiting the claims to mail items after an unsuccessful delivery attempt was unknown at the time, *id.* at 13, that the encoding and decoding limitation was directed to electronic means that could not have been humanly performed, *id.* at 14-15, and that the use of computers required some customization and programming to implement the ’548 claims, *id.* at 17. Return Mail also argues that the

government’s reliance on analogies to Federal Circuit opinions “is not evidence” sufficient to support its summary judgment motion. *Id.* at 15-16.

Again, Return Mail’s “claims only recite routine, conventional activities such as identifying undeliverable mail items, decoding data on those mail items, and creating output data.” *Return Mail*, 868 F.3d at 1368. Similarly, “the limitations [of] reciting particular types of encoded data or particular uses of that data once decoded, such as sending the data or making it available to the sender, depending on the sender’s preferences” do not represent a new or useful application. *Id.* at 1368-69. Unlike *Diehr*’s novel application of a mathematical equation to solve a specific problem and obtain measurements that practitioners of the art “had not been able to obtain,” *Alice*, 573 U.S. at 223 (brackets omitted) (citing *Diehr*, 450 U.S. at 178), the language of the ’548 patent claims provide for the conventional processing of undeliverable mail items but on a computer. Instead, as with *Benson*, the ’548 patent claims’ reliance on “any kind of computer system,” ’548 patent, col. 7, line 7, fails “to supply a ‘new and useful’ application of the [abstract] idea” of sorting undeliverable mail items and providing an updated mailing address. *Id.* at 222 (citing *Benson*, 409 U.S. at 67).

The limitations of the ’548 patent claims were well-known and conventional at the time of the patent application, including the purportedly inventive concept of updating a mailing address *after* a failed delivery attempt. See ’548 patent, col. 1, lines 20-60 (describing the “historical[.]” and “not uncommon” practice of researching and updating mailing addresses of “mail that is returned to sender”). To restate known, conventional steps, but on a computer, is insufficient to transform the claims—otherwise directed to an abstract idea—into an inventive application. See, e.g., *Alice*, 573 U.S. at 225 (holding that claims failed to “do more than simply instruct the practitioner to implement the abstract idea . . . on a generic computer” where “each step of the process [was] ‘purely conventional’” individually and “as an ordered combination” (brackets omitted)); *Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324-25 (Fed. Cir. 2016) (holding no inventive concept where “the claims ‘add’ only generic computer components such as an ‘interface,’ ‘network,’ and ‘database’” because “[t]hese generic computer components do not satisfy the inventive concept requirement”); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015) (“Nor, in addressing the second step of *Alice*, does claiming the improved speed or efficiency inherent with applying the abstract idea on a computer provide a sufficient inventive concept.”); *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can.*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (“[T]he fact that the required calculations could be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter.”).

Moreover, Return Mail’s assertions that the ’548 claims are limited to *electronic* encoding and decoding or *customized* computers and programming are unavailing. It is not enough to “‘attempt to limit the use’ of the abstract . . . idea ‘to a particular technological environment.’” *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (citing *Alice* 573 U.S. at 22-24) (brackets and additional citations omitted). Because the ’548 patent claims are directed to the abstract idea of processing undeliverable mail and providing an updated address, and because there is no genuine dispute of material fact that those claims fail to offer any kind of new application of that idea, the court holds that the disputed patent is patent-

ineligible under 35 U.S.C. § 101. Defendant's remaining grounds for summary judgment under Sections 102 and 305 are moot.

CONCLUSION

For the foregoing reasons, defendant's Section 101 motion for summary judgment is **GRANTED** and the plaintiff's cross-motions for partial summary judgment are **DENIED**. The remaining summary judgment motions are **DENIED AS MOOT**.

The Clerk is directed to enter judgment for defendant.

No costs.

It is so **ORDERED**.

s/ Charles F. Lettow

Charles F. Lettow

Senior Judge