IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF PENNSYLVANIA

INTELLECTUAL VENTURES I LLC, et al., Plaintiffs, v. ERIE INDEMNITY COMPANY, et al., Defendants.))) Civil Action No. 1:14-cv-00220) Judge Mark R. Hornak))
INTELLECTUAL VENTURES I LLC, et al., Plaintiffs, v. OLD REPUBLIC GENERAL INSURANCE GROUP, INC., et al., Defendants.))) Civil Action No. 2:14-cv-01130) Judge Mark R. Hornak)))
INTELLECTUAL VENTURES I LLC, et al., Plaintiffs, v. HIGHMARK, INC., et al., Defendants.))) Civil Action No. 2:14-cv-01131) Judge Mark R. Hornak))

OPINION

Mark R. Hornak, United States District Judge

These are a patent infringement cases filed by Intellectual Ventures I LLC and Intellectual Ventures II LLC ("Intellectual Ventures," "IV," or "Plaintiffs") against three

separate groups of Defendants: the Erie Defendants,¹ the Highmark Defendants,² and the Old Republic Defendants³ (collectively "Defendants"). Now before the Court in these cases⁴ are Motions to Dismiss the respective Complaints filed by all Defendants.

The Erie and Highmark Defendants have moved to dismiss for lack of subject matter jurisdiction as to one patent (the '581 Patent), Dkt. No. 14-220, ECF No. 74, for failure to state a claim as to two patents (the '581 Patent and the '434 Patent) based on allegations that the patents are directed to patent ineligible subject matter, and also for failure to state a claim or, alternatively, to require a more definite statement with regard to the alleged claims. Dkt. No. 14-220, ECF No. 46; Dkt. No. 14-1131, ECF No. 47. The Erie and Highmark Defendants have also moved to strike a declaration relied upon by Plaintiffs in support of subject matter jurisdiction. Dkt. No. 14-220, ECF No. 82.

The Old Republic Defendants have moved to dismiss all claims against them, alleging that three patents (the '581 Patent, the '434 Patent, and the '002 Patent) are directed to patent-ineligible subject matter, and have requested that the Court take judicial notice of certain documents submitted in support of their Motion. Dkt. No. 14-1130, ECF Nos. 30, 33.

¹ These Defendants are Erie Indemnity Company; Erie Insurance Exchange; Erie Insurance Property & Casualty Company; Erie Insurance Company; Flagship City Insurance Company; and Erie Family Life Insurance Company.

² These Defendants are Highmark, Inc.; HM Insurance Group, Inc.; HM Life Insurance Company; Highmark Casualty Insurance Company; and HM Casualty Insurance Company.

³ These Defendants are Old Republic General Insurance Group, Inc.; Old Republic Insurance Company; Old Republic Title Insurance Group, Inc.; and Old Republic National Title Insurance Company.

⁴ The Court had previously consolidated the three actions for pretrial purposes and refers to ECF filing numbers in the 14-220 action unless otherwise indicated. They have since been deconsolidated. Due to the interlocking nature of the arguments presented by the parties, and resolved by this Opinion, it is filed as to each case.

After reviewing the papers filed by all parties and the relevant law, and after extensive, day-long oral argument on April 14, 2015, the Court will grant the Motions to Dismiss for the reasons that follow.⁵

I. BACKGROUND

The patents at issue in these suits are: (a) U.S. Patent No. 6,519,581 B1 ("'581 Patent"), entitled "Collection of Information Regarding a Device or a User of a Device Across a Communication Link," (b) U.S. Patent No. 6,510,434 B1 ("'434 Patent"), entitled "System and Method for Retrieving Information From a Database Using an Index of XML Tags and Metafiles," (c) U.S. Patent No. 6,546,002 B1 ("'002 Patent"), entitled "System and Method for Implementing an Intelligent and Mobile Menu-Interface Agent," and (d) U.S. Patent No. 7,757,298 ("'298 Patent"), entitled "Method and Apparatus for Identifying and Characterizing Errant Electronic Files."

The Erie and Highmark Defendants have moved to dismiss infringement claims relating to the '581 Patent on the grounds that this Court lacks subject matter jurisdiction over Plaintiffs' infringement claims as to that Patent because Intellectual Ventures does not own the Patent and therefore lacks standing to assert infringement of it. Dkt. No. 14-220, ECF No. 74. They also argue that the '581 and the '434 Patents are not directed to patent eligible subject matter, and thus no viable legal claim as to those Patents can be stated in the Complaints. Dkt. No. 14-220,

⁵ This multi-party, multi-patent, multi-argument case squarely implicates the state law of California, and federal law as announced by the Supreme Court, and the Third and Federal Circuits. The Opinion here, out of necessity, is of commensurate explanation and length.

⁶ In Case No. 14-220, IV alleges infringement of the '581 Patent, '002 Patent, '434 Patent, and '298 Patent against the Erie Defendants. In Case No. 14-1130, IV alleges infringement of the '581 Patent, '002 Patent, and '434 Patent against the Old Republic Defendants. In Case No. 14-1131, IV alleges infringement of the '581 Patent, '002 Patent, and '434 Patent against the Highmark Defendants.

⁷ The Old Republic Defendants have joined that standing Motion. Dkt. No. 14-220, ECF No. 77.

ECF No. 46; Dkt. No. 14-1131, ECF No. 47. Alternatively, they argue that all claims of direct and indirect infringement should be dismissed under Rule 12(b)(6) or alternatively that this Court should order Plaintiffs to provide a more definite statement as to all such claims. The Old Republic Defendants challenge the '581, '434, and '002 Patents by arguing that each is directed to patent-ineligible subject matter. ⁸ Dkt. No. 14-1130, ECF No. 30.

II. SUBJECT MATTER JURISDICTION OF INFRINGEMENT CLAIMS AS TO THE '581 PATENT

Whether this Court has subject matter jurisdiction over the instant action as to the '581 Patent is determined by the law of the Third Circuit because it is a procedural question "not unique to patent law." *Univ. of Utah v. Max-Planck-Gesellschaft Zur Forderung Der Wissenschaften E.V.*, 734 F.3d 1315, 1319 (Fed. Cir. 2013) *cert. denied sub nom. Caret v. Univ. of Utah*, 134 S. Ct. 2819 (2014). "A motion to dismiss for want of standing is properly brought pursuant to Rule 12(b)(1), because standing is a jurisdictional matter." *Constitution Party of Pa. v. Aichele*, 757 F.3d 347, 357 (3d Cir. 2014) (internal quotation marks and citation omitted).

The Third Circuit would categorize the challenge here as a factual one⁹ because it does not simply attack the sufficiency of the '581 Complaints, but rather attacks assertions supporting jurisdiction in those Complaints as factually inaccurate. *Id.* at 358. When factual challenges are lodged, a court is not bound to accept the truthfulness of the allegations in a complaint and may consider evidence outside the pleadings to satisfy itself of its jurisdiction. *Id.* It is a plaintiff's

⁸ The Erie and Highmark Defendants stated that they did not challenge the '002 Patent or the '298 Patent (asserted against the Erie Defendants only) in this Court because those Patents were subject to review before the USPTO. Dkt. No. 14-220, ECF No. 47, at 9 n.2. Based upon Old Republic's challenges, however, this Court concludes, for the reasons stated in this Opinion, that the '002 Patent is directed to patent-ineligible subject matter. The only patent not addressed in this Opinion is the '298 Patent, the infringement of which is asserted only against the Erie Defendants. Because there is no pending Motion requesting to either stay or dismiss the action as to the '298 Patent, the case against the Erie Defendants will remain live as to the '298 Patent.

⁹ The other possibility is a facial challenge, which is based on the sufficiency of the allegations of the Complaint alone. *Id.* at 358.

burden to prove that a court has subject matter jurisdiction. *Mortensen v. First Fed. Sav. & Loan Ass'n*, 549 F.2d 884, 891 (3d Cir. 1977). If a plaintiff lacks standing when the suit is brought, the Court lacks subject matter jurisdiction. *Aichele*, 757 F.3d at 357.

In the patent context, plaintiffs suing for infringement bear "the burden to show necessary ownership rights to support standing to sue." *Abbott Point of Care Inc. v. Epocal, Inc.*, 666 F.3d 1299, 1302 (Fed. Cir. 2012). To successfully assert standing, a plaintiff "must demonstrate that it held enforceable title to the patent at the inception of the lawsuit" or the infringement claims will be dismissed for lack of jurisdiction. *Abraxis Bioscience, Inc. v. Navinta LLC*, 625 F.3d 1359, 1364 (Fed. Cir. 2010). Patent assignments must be in writing, 35 U.S.C. § 261, and the writing "must show a clear and unmistakable intent to transfer ownership." *Univ. Patents, Inc. v. Kligman*, 762 F. Supp. 1212, 1219 (E.D. Pa. 1991) (citing *McClaskey v. Harbison–Walker Refactories Co.*, 138 F.2d 493 (3d Cir. 1943)). Courts interpreting assignment contracts to decide ownership matters look to state law to determine and apply the appropriate rules of interpretation. *Abbott*, 666 F.3d at 1302.

A. The Contentions of The Parties

The Patent Assignment ("Assignment Agreement") at issue here contains a list of seventeen (17) enumerated "patents and patent applications" owned by AllAdvantage.com¹⁰ and then states:

Assignor [AllAdvantage], does hereby assign unto the Assignee [Alset, Inc.], all right, including common law rights, title and interest in the United States of America, Canada, the European Union, and all other countries and jurisdictions of

¹⁰ The purported chain of ownership proceeded with the following assignments: (1) the inventors to Aveo, Inc.; (2) Aveo, Inc. to Sherwood Partners; (3) Sherwood Partners to AllAdvantage; (4) AllAdvantage to Alset, Inc.; (5) Alset, Inc. to Expeditionary Sound; and (6) Expeditionary Sound to Intellectual Ventures. Dkt. No. 14-220, ECF Nos. 76; 76-1–5; 76-8–9. Defendants only challenge the fourth transfer in this chain.

the world in and to *said* patents together with the goodwill of the business symbolized by *said* patents and applications and registrations thereof.

Dkt. No. 14-220, ECF No. 76-1, at 5-6 (emphasis added).

The Erie and Highmark Defendants have moved to dismiss all claims relating to the '581 patent, arguing that the Court lacks subject matter jurisdiction because IV cannot carry its burden of showing ownership, and thus has no standing to sue. Dkt. No. 14-220, ECF No. 74. The Old Republic Defendants have joined that Motion. Dkt. No. 14-220, ECF No. 77. Defendants essentially contend that the assertions in Plaintiffs' Complaints that "Intellectual Ventures I is the owner and assignee of all right, title, and interest in and to the '581 . . . Patent[] and holds the right to sue and recover damages for infringement thereof, including past damages" are not true. *E.g.*, Dkt. No. 14-220, ECF No. 1 ¶ 22. Specifically, those Defendants argue that the chain of title for the '581 patent consists of six (6) transfers, and that while certain transfers contained language that unequivocally included the '581 Patent or its application, the fourth transfer in the chain enumerated certain specific patents and applications subject to that transfer, but omitted the '581 Patent or its then-pending application. Dkt. No. 14-220, ECF No. 75, at 9. Because a plain reading of the Assignment Agreement shows no conveyance of, or even an intent to convey, the '581 Patent or its application, Defendants contend the Court should not review any

¹¹ After Defendants informed the Court of their intent to move to dismiss on these grounds, the Court gave Plaintiffs an opportunity to consider substituting the '581 Patent's parent, over which there is no articulated dispute as to ownership, for the '581 Patent in these lawsuits. Dkt. No. 14-220, ECF No. 68, at 2. On March 6, 2015, Plaintiffs filed a Notice of Asserted Patents in which they notified the Court that they "do[] not intend to substitute the parent of the '581 patent for the '581 patent." Dkt. No. 14-220, ECF No. 80.

¹² Defendants argue that because seventeen (17) patents and applications are specifically listed in the Assignment Agreement and then the document refers to "said patents" in transferring them, there is no ambiguity in the failure to include the '581 Patent's application in that contract. Rather, the document clearly shows the '581 patent was not included in the transfer. Dkt. No. 14-220, ECF No. 75, at 9. This is so even though the '581 Patent's parent was expressly listed and transferred in the document, because other pending applications related to the parent were listed and thus transferred. *Id.* at 10, 14.

extrinsic evidence pertaining to that Agreement in support of ownership and should instead dismiss all claims pertaining to the '581 Patent for want of subject matter jurisdiction.

IV counters by arguing that in the first place, a presumption of validity applies to the Assignment Agreement because it was recorded with the U.S. Patent and Trademark Office ("USPTO"), and Defendants have not met their burden of disproving ownership. Dkt. No. 14-220, ECF No. 81, at 8, 9. Moreover, Plaintiffs contend that the involved Assignment Agreement by its terms is sufficient to show a transfer of title to the '581 Patent's application (the '858 application) for either of two (2) reasons. First, because the '581 Patent's parent (the '983 Patent), was specifically listed in the Assignment Agreement, and because the '858 application was a direct continuation of that patent, the future patent right in the '581 Patent was contained within the '983 Patent, thus automatically bringing the application within the scope of "said patents" listed in the Assignment Agreement. *Id.* at 11. Second, the fact that the Assignment Agreement transfers "goodwill of the business symbolized by said patents and applications and registrations thereof" indicates an intent to transfer the '581 Patent's application because the '983 (parent) Patent is listed, goodwill "includes the intellectual property itself," and so the goodwill of the '983 Patent includes its continuation application. *Id.* at 13–14.

Furthermore, Plaintiffs argue, the Court is required to at least provisionally accept extrinsic evidence to determine if the contract is susceptible to either party's interpretation, *id.* at 16, and the extrinsic evidence illustrates the parties' intent to transfer. The extrinsic evidence IV offers to prove intent to transfer the '581 Patent's application through the Assignment Agreement from AllAdvantage to Alset is: (1) a Declaration of Paul Hurley, co-founder of the Assignee, Alset, Inc.; (2) an excerpt from the deposition transcript of Lisa Benado, the attorney who prosecuted the '581 Patent's application; and (3) documents showing actions taken by the

parties to the Assignment Agreement after it was executed.¹³ Dkt. No. 14-220, ECF No. 81-1-81-9.

Defendants reply by arguing that the presumption of validity cited by Plaintiffs is purely ministerial and has no effect on the Court's interpretation of what rights were transferred through the Assignment Agreement. Dkt. No. 14-220, ECF No. 84, at 7–8. As a result, they claim that Plaintiffs are simply wrong when they argue that Defendants must disprove intent to transfer ownership—rather, IV retains the burden of demonstrating ownership of the Patent to sustain jurisdiction of this Court. *Id.* at 8. Defendants further argue that there is no rule of law that automatically transfers related patent applications with their parent patents, and that the cases Plaintiffs cite in that regard are inapposite—in contrast, pending applications must be transferred by a written instrument in the same way as are patents. *Id.* at 9–11. Defendants also counter the suggestion that extrinsic evidence should be reviewed, saying that because the language of the Assignment Agreement is unambiguous, Plaintiffs should not be allowed to introduce such evidence when there is no language indicating a clear intent to transfer the patent at issue. *Id.* at 14–15. Lastly, the moving Defendants argue that even if extrinsic evidence is considered, the relevant factors do not tip in IV's favor to demonstrate ownership. *Id.* at 16–18.

B. The Rules of The Decisional Road

As an initial matter, recording an Assignment Agreement which lists multiple patents and applications with the USPTO does not create a presumption that a patent omitted from that express list of assigned property was in fact transferred. "While recording [a patent assignment

¹³ Those documents are: (1) a Revocation of Prior Powers of Attorney, Power of Attorney by Applicant and Notification of Change of Fee and Correspondence Address filed in the prosecution of Patent Application No. 09/844/858 [the '581 Patent's application]; (2) a copy of the '581 Patent, which issued on February 11, 2003; (3) a copy of a Terminal Disclaimer filed in the prosecution of the '581 Patent's application; and (4) a copy of a fee transmittal form filed with regard to the '581 Patent's application. Dkt. No. 14-220, ECF Nos. 81-5–8.

¹⁴ They also take issue with IV's assertion that "goodwill" includes the underlying intellectual property. *Id.* at 12.

with the USPTO] creates a presumption in [plaintiff's] favor if the validity of the Agreement is challenged, it has no bearing on the question of what substantive rights were actually transferred." Clouding IP, LLC v. Google Inc., 61 F. Supp. 3d 421, 431 n.12 (D. Del. 2014) reargument denied sub nom. Clouding IP, LLC v. AT & T Mobility LLC, No. 13-1342, 2014 WL 6466833 (D. Del. 2014); see also 37 C.F.R. § 3.54 ("The recording of a document . . . is not a determination by the Office of . . . the effect that document has on the title to an application, a patent, or a registration."). ¹⁵ IV's argument based on this principle simply does not hold water.

The parties agree that whether an assignment of rights dealing with the '581 Patent application occurred is a matter of California contract law. Dkt. No. 14-220, ECF Nos. 75, at 18–19; 81, at 8–9. However, their views diverge substantially on the question of what California law requires the Court to now do. 16

California positive law requires that "[t]he language of a contract is to govern its interpretation, if the language is clear and explicit, and does not involve an absurdity," Cal. Civ. Code § 1638 (2015), and states that "[w]hen a contract is reduced to writing, the intention of the parties is to be ascertained from the writing alone, if possible," *id.* § 1639. These statements read like the rules of contract interpretation in many other states by which courts preliminarily decide

¹⁵ Even if some presumption of ownership arose from the face of the '581 Patent listing Alset as the Assignee, the Court concludes that any preliminary burden on Defendants to rebut any presumption arising from the listing of Alset as the assignee on the face of the '581 Patent, SiRF Tech., Inc. v. Int'l Trade Comm'n, 601 F.3d 1319, 1327–28 (Fed. Cir. 2010), was more than fulfilled when Defendants pointed to the plain exclusion of the '581 Patent or its application from a specific list within the Assignment Agreement, the document which IV admits was relied upon to show ownership in the '581 Patent's application process. See Dkt. No. 14-220, ECF No. 81, at 9 ("[T]he Agreement from AllAdvantage to Alset was recorded at the USPTO as part of the '858 Application's prosecution."); cf. U.S. Philips Corp. v. Iwasaki Elec. Co., 505 F.3d 1371, 1375 (Fed. Cir. 2007) (holding that assignment present on the face of the patent is "not a conclusive indication" of patent ownership). This is especially true in light of the fact that IV retains the burden of proving ownership in order to confirm this Court's subject matter jurisdiction, Mortensen, 549 F.2d at 891; Abbott, 666 F.3d at 1302, meaning that Plaintiffs must point to a writing that shows "a clear and unmistakable intent to transfer ownership," Kligman, 762 F. Supp. at 1219 (citing McClaskey, 138 F.2d at 499)

¹⁶ And the Court cannot fault them for that divergence, because for the reasons that follow, the California Supreme Court's own precedent is not a font of clarity on the general rules of contract interpretation.

whether a contract is clear on its face and will accept parol (extrinsic) evidence *only if* the contract's terms are ambiguous. *See Murphy v. Duquesne Univ. Of The Holy Ghost*, 777 A.2d 418, 429 (Pa. 2001) ("Only where a contract's language is ambiguous may extrinsic or parol evidence be considered to determine the intent of the parties.").

However, California law adds a bit more spice to the contract interpretation recipe: while the familiar rule for many courts is that extrinsic evidence is wholly secondary, and should not be considered absent an ambiguity in the contract's terms, California law seemingly requires courts to consider extrinsic evidence at least a little bit in the first instance, along with the contract text at issue, to determine whether the contract is open to ambiguity. See Pac. Gas & Elec. Co. v. G. W. Thomas Drayage & Rigging Co., 442 P.2d 641, 645 (Cal. 1968) ("[T]he meaning of a writing can only be found by interpretation in the light of all the circumstances that reveal the sense in which the writer used the words. The exclusion of parol evidence regarding such circumstances merely because the words do not appear ambiguous to the reader can easily lead to the attribution to a written instrument of a meaning that was never intended.") (internal quotation marks, alterations, and citations omitted); Wolf v. Superior Court, 8 Cal. Rptr. 3d 649, 655 (Cal. Ct. App. 2004), as modified on denial of reh'g (Feb. 19, 2004) ("[I]t is reversible error for a trial court to refuse to consider such extrinsic evidence on the basis of the trial court's own conclusion that the language of the contract appears to be clear and unambiguous on its face."). California has therefore developed a "two-step process" for courts to use in deciding whether to admit parol evidence:

First the court provisionally receives (without actually admitting) all credible evidence concerning the parties' intentions to determine "ambiguity," i.e., whether the language is "reasonably susceptible" to the interpretation urged by a party. If in light of the extrinsic evidence the court decides the language is

"reasonably susceptible" to the interpretation urged, the extrinsic evidence is then admitted to aid in the second step—interpreting the contract.

Wolf, 8 Cal. Rptr. 3d at 656 (internal citations omitted). 17

Despite these broad statements, the extrinsic evidence offered must be "relevant to prove a meaning to which the language of the instrument is reasonably susceptible." *Pacific Gas*, 442 P.2d at 644. If the contract is not "reasonably susceptible" to the proposed construction, extrinsic evidence should not be admitted in any fashion. *See Producers Dairy Delivery Co. v. Sentry Ins. Co.*, 718 P.2d 920, 925 (Cal. 1986) ("While extrinsic evidence may be considered by a court as an aid in the interpretation of a written contract when it is relevant to prove a meaning to which the language of the instrument is reasonably susceptible, if the evidence offered would not persuade a reasonable man that the instrument meant anything other than the ordinary

However, as Justice Baxter explained in *Dore*, the majority, at least in that case, no longer appeared to adopt quite as broad a view of *Pacific Gas*, and instead seemed to hold that "a 'latent' ambiguity is simply one that becomes manifest when one attempts to apply the contract's language to the specific facts that gave rise to the parties' legal dispute. Even then, extrinsic evidence is admissible only to prove a meaning the contract's language will reasonably accommodate." *Dore*, 139 P.3d at 63 (Baxter, J., concurring). This reading seems to best comport with California positive law that "[t]he language of a contract is to govern its interpretation, if the language is clear and explicit, and does not involve an absurdity," Cal. Civ. Code § 1638 (2015), and "[w]hen a contract is reduced to writing, the intention of the parties is to be ascertained from the writing alone, if possible," *id.* at § 1639, as well as a long line of other California cases (though predominantly in the insurance context), which note that traditional contract interpretation rules apply and then never mention extrinsic evidence, *see*, *e.g.*, *State v. Cont'l Ins. Co.*, 281 P.3d 1000, 1004—05 (Cal. 2012), *as modified* (Sept. 19, 2012) ("[I]ntent is to be inferred, if possible, solely from the written provisions of the contract. If contractual language is clear and explicit, it governs.") (internal quotation marks and citations omitted).

Of note, even the court in *Pacific Gas* recognized that "extrinsic evidence is not admissible to add to, detract from, or vary the terms of a written contract"—the court stated only that courts should at least take a quick look at extrinsic evidence before recognizing its relevance or irrelevance in a given scenario. 442 P.2d at 645.

¹⁷ This rule calling for the provisional acceptance of extrinsic evidence has been strongly and more recently criticized by the California Supreme Court. For instance, in *Dore v. Arnold Worldwide, Inc.*, 139 P.3d 56, 62 (Cal. 2006), Justice Baxter, with whom Justice Corrigan joined, authored a concurring opinion stating, "[r]ead in its broadest sense, *Pacific Gas* thus stretched the unremarkable principle that extrinsic evidence is admissible to resolve a contractual ambiguity into a rule that parol evidence is *always* admissible to *demonstrate* ambiguity *despite* facial clarity. The effect is that, despite their best efforts to produce a clear written agreement, parties can never confidently conduct their affairs on the basis of the language they have drafted." Judge Kozinski has also made his disagreement with *Pacific Gas* known. *See Trident Center v. Conn. General Life Ins. Co.*, 847 F.2d 564, 568 (9th Cir. 1988) ("Two decades ago the California Supreme Court in [*Pacific Gas*] turned its back on the notion that a contract can ever have a plain meaning discernible by a court without resort to extrinsic evidence.").

meaning of its words, it is useless.") (internal quotation marks, citations, and alternations omitted); *Parsons v. Bristol Dev. Co.*, 402 P.2d 839, 842—43 (Cal. 1965) ("Extrinsic evidence is 'admissible to interpret the instrument, but not to give it a meaning to which it is not reasonably susceptible."). ¹⁸

C. Interpretation of The Assignment Agreement

In the context of this case, the Court concludes that the Assignment Agreement is not reasonably susceptible to multiple interpretations, with or without the benefit of extrinsic evidence. The Assignment Agreement clearly and unambiguously points to the conclusion that the '581 Patent (or, as is more relevant, its application at the time of transfer) was not among the patents and applications transferred, and the proffered extrinsic evidence shows a bald effort to add the Patent to a list from which it is excluded. The Assignment Agreement is simply not "reasonably susceptible" to that alternate interpretation. *Curry*, 48 Cal. Rptr. 2d at 631; *cf. Dow Chem. Co. v. Nova Chems. Corp. (Canada)*, 458 F. App'x 910, 914 (Fed. Cir. 2012) (interpreting Delaware law and finding no ambiguity in a contract attaching a schedule which expressly listed patents and excluded the one at issue; holding that a patent was never transferred and that interpreting the contract otherwise would have required reading the explicit list out of the contract). The Agreement, which is only two (2) pages in length, ¹⁹ specifically lists fifteen (15) patent applications and two (2) issued patents owned by AllAdvantage, and then assigns "said

¹⁸ As one California Court of Appeals has stated:

[[]E]vidence of the meaning the parties gave to the contract language is only relevant if the contract language itself is reasonably susceptible to that meaning. Thus, extrinsic evidence cannot be used to show that when the parties said "Bunker Hill Monument" they meant "the Old South Church" or that when they said "pencils" they really meant "car batteries."

Curry v. Moody, 48 Cal. Rptr. 2d 627, 631 (Cal. Ct. App. 1995) (internal citations omitted).

¹⁹ Which indicates only that the contract was not comprised of hundreds of pages of technical terms, and that a drafting error is arguably less likely to be made in these circumstances.

patents together with the goodwill of the business symbolized by said patents and applications and registrations thereof" to Alset. Dkt. No. 14-220, ECF No. 76-1, at 5-7. Absent a rule of law that implicitly transfers all continuations of existing patents automatically with their parent applications, ²⁰ the Court concludes from the face of the Agreement itself that the chain of title was broken with regard to the '581 Patent.

With regard to Plaintiffs' first proposed construction of the Assignment, that "said patents" does not actually mean the patents and applications expressly listed but instead means the patents and applications listed *in addition to* their continuation applications, the Court concludes that saying it is so does not make it so, and the Court simply cannot read that additional language into the Assignment Agreement without making it a wholly different agreement,²¹ and thus the document is not reasonably susceptible to the proposed interpretation. Patent applications, like patents themselves, "shall be assignable in law by an instrument in writing." 35 U.S.C. § 261.

The Assignment Agreement here assigns the patents listed. It also assigns many patent applications, also specifically listed. Continuation or not, the Court cannot assume that a patent application meant to be conveyed would not be explicitly listed when fifteen (15) others are expressly included on the list. While the Court recognizes IV's argument, supported by Attorney Benado's deposition testimony that "[t]here's no particular set of assignment language that is universal so there's lots of ways of conveying title," Dkt. No. 14-220, ECF Nos. 81, at 19; 81-3, at 8; see also Minco, Inc. v. Combustion Engineering, Inc., 95 F.3d 1109, 1116–17 (Fed. Cir.

²⁰ The Court addresses this in more detail below.

²¹ As Abraham Lincoln once explained, "[T]here had been an attempt made to show that a calf had five legs—the way the point was to be established was by calling the tail a leg, but the decision of the judge was that calling the tail a leg, did not make it a leg, and the calf had but four legs after all." Michael Burlingame's *Abraham Lincoln: A Life, Volume 2* 468 (2008 The Johns Hopkins University Press).

1996), there do need to be actual words that would effect a "clear and unmistakable intent to transfer ownership," *Kligman*, 762 F. Supp. at 1219 (citing *McClaskey*, 138 F.2d at 499). Without an automatic rule of continuation transfer by operation of law, the Court concludes that it is wholly unreasonable to view the Assignment Agreement as having transferred the '581 Patent or its application.

1. An "Automatic Transfer" Rule?

IV does in fact contend that there is an automatic rule of transfer whereby continuation applications of existing patents move with their parent patents by operation of law when an assignment is executed.²² *E.g.*, Dkt. No. 14-220, ECF No. 81, at 11–13. Plaintiffs specifically point to Sections 201.07 and 306 the Manual of Patent Examining Procedure ("MPEP") to advocate the view that "assignment of a parent patent automatically confers rights in direct continuations."²³ Dkt. No. 14-220, ECF No. 81, at 12. While this argument is not without some

A deed of assignment . . . by which a patentee of an invention conveys all the right, title, and interest which he has in the 'said invention' . . . and also all right, title, and interest which may be secured to him from time to time . . . carries the entire invention and all alterations and improvements and all patents whatsoever, issued and extensions alike[.]

²² "The question of whether or not an agreement provides for automatic assignment is a matter of federal [patent] law." SiRF Tech., Inc. v. Int'l Trade Comm'n, 601 F.3d 1319, 1326 (Fed. Cir. 2010).

²³ IV also cited several cases for the proposition that "future rights may automatically transfer with the transfer of a parent patent." Id. at 11 (citing Gerber Scientific Int'l, Inc. v. Satisloh AG, Satisloh N. Am., Inc., No. 07-1382, 2009 WL 2869705, at *4 (D. Conn. Sept. 2, 2009); E.I. Du Pont de Nemours & Co. v. Okuley, No. 97-1205, 2000 WL 1911430, at *26 (S.D. Ohio Dec. 21, 2000)); see also Dkt. No. 14-220, ECF No. 81, at 8 ("When a party assigns a patent and references an 'invention,' 'improvement,' or similar language, it presumptively assigns continuations absent express language to the contrary." (citing, e.g., DDB Technologies, L.L.C. v. MLB Advanced Media, L.P., 517 F.3d 1284, 1290 (Fed. Cir. 2008))). The Court concludes that a more accurate statement of the law is that "future rights may automatically transfer with the transfer of a parent patent if the parties so agree" and that the relevant term of the Assignment Agreement here does not contain language which allows for such automatic transfer. Okuley (a case cited by IV which the Federal Circuit disapproved of on another point of law, see Chou v. Univ. of Chicago, 254 F.3d 1347, 1358 (Fed. Cir. 2001)) states that "[a]n assignment which conveys the entire right, title, and interest in an invention includes 'all alterations and improvements and all patents whatsoever, issued and extensions alike, to the extent of the territory specified in the instrument." 2000 WL 1911430, at *26 (quoting Hendrie v. Sayles, 98 U.S. 546, 553-54 (1879)). The Court does not disagree—it merely notes that the rights transferred in that case were to an "invention." Neither Okuley, nor the Supreme Court decision quoted in it, contradicts the conclusion that in this case the Assignment Agreement does not express the parties' intent to convey continuation applications. The quoted Supreme Court case states:

passing facial logic, the Federal Circuit has explained that "[t]he MPEP sets forth PTO procedures; it is not a statement of law. Moreover, MPEP § 306 refers to a PTO requirement for issuing a patent from a CIP [continuation-in-part] application to an assignee; it does not alter the legal ownership rights in patent applications and issued patents." *Regents of Univ. of New Mexico v. Knight*, 321 F.3d 1111, 1121 (Fed. Cir. 2003) (citing *Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1180 n.10 (Fed. Cir. 1995)); *Atmel Corporation v. Information Storage Devices, Inc.*, 198 F.3d 1374, 1384 (Fed. Cir. 1999) ("[T]he courts are the final authorities on issues of statutory construction. They must reject administrative constructions . . . inconsistent with the statutory mandate or that frustrate the policy that Congress sought to implement."). Indeed, while *some* rights in future interests, such as express grants of "future inventions," may trigger an automatic transfer of an interest, *SiRF Tech.*, 601 F.3d at 1326, such a broad rule cannot govern this situation when the Agreement explicitly lists out each patent and application transferred, purports to transfer only "said patents" and omits one owned by the Assignor. IV's argument in this regard misses the mark.

Hendrie, 98 U.S. 546 at 553-54. The opinion later states:

An assignment of an invention secured by letters-patent . . . is a contract, and, like all other contracts, is to be construed so as to carry out the intention of the parties to it . . . it is well settled that the title of an inventor to obtain an extension may be the subject of a contract of sale, and when it is, the instrument by which the sale was effected is the proper subject of construction, in order to determine whether it secures to the purchaser any subsequent extension of the patent, or merely the patent for the original term.

Id. at 554 (emphasis added).

What this demonstrates is that the terms of an assignment are what govern the scope of what is transferred, not some "automatic" rule. And the Court agrees with Defendants that there are meaningful distinctions between the contractual language in cases like *Okuley* (transferring "the entire right, title, and interest in an invention") and *DDB Technologies* (conveying "ideas, inventions and improvements") which broadly conveys "inventions" or "ideas" to effect transfers of future rights by the agreement of the parties, as opposed to specifically enumerated patents and patent applications as in this case. *See* Dkt. No. 14-220, ECF No. 84, at 9–10 (comparing language of the Assignment Agreement with that in other cases).

There simply is no legal rule mandating that every time a parent patent is assigned, that patent's continuation application automatically follows. Rather, that "automatic transfer" would have to be based on the agreement of the parties, and generally includes language that transfers all future rights in an invention or an idea, rather than just a patent itself.²⁴

In *Bellehumeur v. Bonnett*,²⁵ a party made a statement to the USPTO that common ownership existed in a partnership "because he believed that under Section 306 of the Manual of Patent Examining Procedure that by assigning the parent patent to RHI Partnership, Bellehumeur and his co-inventors also assigned all the rights to any continuation patent applications." No. 00-863, 2006 WL 6635952, at *4 (C.D. Cal. Mar. 21, 2006) *aff'd*, 219 F. App'x 991 (Fed. Cir. 2007). The *Bellehumeur* Court then explained that "[d]uring the trial after remand, [the party] conceded that his interpretation of Section 306 was in error, and that RHI Partnership did not own the '870 application by virtue of the assignment of the '410 patent." *Id.* The court later noted that while the party "acted negligently in failing to fully research the factual background

²⁴ Plaintiffs and Defendants both cite *Euclid Chem. Co. v. Vector Corrosion Technologies, Inc.*, 561 F.3d 1340 (Fed. Cir. 2009) in support of their arguments. In *Euclid*, the Federal Circuit reversed a district court's decision not to consider extrinsic evidence of the parties' intent because the district court concluded an assignment contract was unambiguous under Ohio law. *Id.* at 1344. However, *Euclid* is distinguishable from the case here: in that case, the contract assigned "all my interest in . . . applications for patents and issued U.S. patent, namely [list of four (4) applications and one (1) issued patent] . . . any and all divisional applications, continuations, and continuations in part [of the listed patents]". *Id.* at 1342. The question was whether that language conveyed a continuation-in-part application to the issued listed patent. *Id.* Importantly, though, that continuation-in-part application had issued *prior to* the execution assignment agreement. *Id.*

So while the district court in *Euclid* had concluded that the agreement was unambiguous and conveyed all continuations-in-part of the listed patent (including the continuation-in-part which had issued before the agreement was executed), the Federal Circuit held that the assignment was ambiguous because it included all continuations-in-part, but also included a specific list which omitted the already-issued patent. *Id.* at 1343. Here, by contrast, the Assignment Agreement does not include language which would convey all continuations of listed patents, *and also* does not include the '581 Patent or its application. The Assignment Agreement therefore lacks the type of contradiction which the Federal Circuit determined to be ambiguous in *Euclid*.

²⁵ The relevant part of this case dealt with the issue of inequitable conduct based on, *inter alia*, misrepresentations to the USPTO regarding ownership of a patent. The district court had conducted a bench trial on infringement and awarded damages to the plaintiff, but the Federal Circuit subsequently vacated the judgment and remanded. *Bellehumeur v. Bonnett*, 127 F. App'x 480, 481 (Fed. Cir. 2005). The district court's opinion cited above is the decision on remand, which was summarily affirmed. *Bellehumeur v. Bonnett*, 219 F. App'x 991 (Fed. Cir. 2007) (per curiam).

regarding the assignment of the '410 patent and the legal effect of an assignment of a parent patent on continuation applications," there was no intent to deceive, as was required by the question involved in that case. *Id.* at *5.

That opinion was issued after the Federal Circuit remanded the case in the first instance. In the Federal Circuit's initial (unpublished) opinion, that court wrote:

[T]he January 1, 1996 assignment only assigns the invention claimed in the issued '410 patent, and the pending counterpart foreign applications. It lists no continuing or related domestic applications based on the '410 patent. At oral argument, Bellehumeur's counsel conceded that the '161 patent was not expressly mentioned in the January 1, 1996 assignment. Because patent rights must be transferred by written instrument, 35 U.S.C. § 261 (2000), any alleged intention by the named inventors of the '410 patent to transfer rights to the '161 patent is ineffective and is insufficient to establish Bellehumeur's standing.

Bellehumeur v. Bonnett, 127 F. App'x 480, 484–85 (Fed. Cir. 2005). The Federal Circuit does not appear to have adopted a rule automatically transferring continuation patent applications with their parent patents in written agreements, and the Court declines to adopt such a rule here. In the absence of such an automatic transfer rule, no amount of extrinsic evidence or argument can demonstrate that the Assignment Agreement is "reasonably susceptible" to IV's proposed interpretation that the phrase transferring "said patents," when included after an express list of patents and applications, also included an application omitted from that list.²⁶

such was the case here.

with regard to extrinsic evidence, IV's attorneys contend that the '581 Patent application was automatically transferred with the parent patent, and submit Mr. Hurley's Declaration to argue that at least one party to the transfer (Mr. Hurley) believed that such a legal rule applied (if he did not, one may wonder why he did not just include the patent application at issue in the list of seventeen (17) others patents and applications) because he apparently thought, as Alset's co-founder, that he negotiated an agreement to transfer ownership of "all assets" previously owned by his other company, Aveo, Inc. See ECF No. 81-2, at 3. Even if so, then that position essentially amounts to the premise underlying a unilateral mistake of law in which one side misunderstands the law at the time of contracting. Cal. Civ. Code § 1578. However, the other requirement for finding a unilateral mistake of law is that the other side knows the correct law but does not rectify the other party's misunderstanding. Id. No one argues that

2. Does The Assignment of Goodwill Save The Day?

IV's second argument, that the phrase "goodwill of the business symbolized by said patents and applications and registrations thereof" encompasses the '581 Patent's application, is similarly unavailing. For this proposed interpretation to be potentially reasonable, the '581 Patent's application would need to be included in the definition of "goodwill." That the Agreement states the "goodwill of the business" is "symbolized by said patents . . ." is unhelpful to IV because it follows the same legal fallacy as the previous argument: if only the "said," or listed, patents are transferred, and there is no automatic rule of law that transfers child patent applications along with their parent patents, then the "goodwill of the business symbolized by said patents" refers to the goodwill associated with those said patents only and not unenumerated others. The remaining part of the phrase, ". . . said patents and applications and registrations thereof" again only references the applications and registrations of the listed ("said") patents.

With regard to Plaintiffs' argument that the '581 Patent's application is necessarily part of the "goodwill" of its parent patent (the '983 Patent) because it is the same intellectual property underlying the parent patent whose goodwill is being transferred, Dkt. No. 14-220, ECF No. 81, at 13–14, the Court has not discerned, nor has IV pointed to, any legal authority which treats pending patent applications synonymously with a general notion of "goodwill." *See id.* at 13–14 (asserting that the '581 Patent's application is "necessarily included" in the definition of goodwill without citation to authority). Instead, IV only argues that the "goodwill" term is similar enough to language conveying all interest in an "invention," which other courts have interpreted as conveying future rights. *Id.* at 14.

While a patent application is a form of intangible property, as is goodwill, the argument that the two are the same thing simply does not comport with a reasonable understanding of the term. See generally Weston Anson, The Intangible Assets Handbook 7 (ABA Section of Business Law 2007) (explaining the differences between finite-lived intangible assets like patents and copyrights and those that are indefinite-lived, such as goodwill and many trademarks). While recognizing that this case does not arise in the tax context, it is also notable that in tax matters, patent rights are treated as distinct from "goodwill." Compare 26 U.S.C. § 197(d)(1)(A) with 26 U.S.C. § 197(d)(1)(C)(iii); see also id. § 167(g)(6) (distinguishing depreciation deduction method allowed when dealing with "patents" rather than other intangibles); Newark Morning Ledger Co. v. United States, 507 U.S. 546, 554–56 (1993) (generally remarking on the differential treatment afforded patents and other intangibles over the years).²⁷

Similar interpretive concepts underlie the principles that courts are not to apply general provisions when a matter is more specifically dealt with in the same enactment, *Fourco Glass Co. v. Transmirra Products Corp.*, 353 U.S. 222, 228 (1957), and a more specific statute (or here, body of law), should govern over a more general one, *Morton v. Mancari*, 417 U.S. 535, 550—51 (1974) (a general statute will not be held to have repealed by implication a more specific one unless there is "clear intention otherwise"). Patent rights are considered separate and apart from other similar intangible property rights governed by distinct bodies of law, such as copyrights and trademarks, whereas goodwill more appropriately defines those intangible assets which are not already accounted for in other categories of assets.²⁸ The Court therefore

²⁷ Such distinct treatment indicates the general meaning of the terms do not necessarily overlap. Moreover, the very fact that there is an entire area of law devoted to protecting patent rights, *see* Patent Act, 35 U.S.C. § 100 *et seq.*, would seem to counsel against also lumping patent rights into the generic definition of goodwill, which is more of a catchall category containing essentially common law legal rules applicable to intangible rights not otherwise protected.

²⁸ Patent rights and goodwill appear to be distinct under California law as well. The Court would note that in *Allen* v. *Shaver*, 289 P.2d 255 (Cal. Ct. App. 1955), the court considered goodwill and patent rights separately, as it stated that at the time a business was dissolved, it "had no good will of any value and its only asset was the patent

cannot conclude that the Assignment Agreement is reasonably susceptible to the interpretation urged by IV, that the "goodwill" phrase includes the '581 Patent or its then-pending '858 application. Further, even if patent applications could be construed as intangible assets included in the definition of "goodwill" (since the Assignment Agreement suggests the parties agreed that goodwill can be "symbolized by" them),²⁹ they run into the same problem as with the "said patents" argument: the "patent applications" referred to as part of the goodwill are not the continuation patent applications of each listed patent, but the applications of those listed patents themselves.

3. The Avoidance of Illusory Contracts

IV also argues that the Court should not "read [the Assignment Agreement] to render a provision or term meaningless or illusory." Dkt. No. 14-220, ECF No. 81, at 13 (quoting Walker Digital, LLC v. Expedia, Inc., 2014 U.S. App. LEXIS 24712, at *10 (Fed. Cir. Dec. 30, 2014)). The Court agrees, and therefore concludes that it cannot read the Agreement in such a way that would make "said patents" and their "goodwill" essentially interchangeable terms (since according to IV, "goodwill" includes the intellectual property itself), thus rendering one or the other of them meaningless. That Plaintiffs argue the '581 Patent's application could fit within the categories of both "said patents" and "goodwill" proves the point.

As one California Court of Appeals has written, with regard to release agreements with an insurance company:

Appellants urge us to interpret the plain language in their release agreements discharging respondents from "any and all claims, demands, actions and causes of

application referred to in the pleadings herein, which was then of a value of \$97.20, and the total capital of the partnership as of said date, including the patent application and the invention represented thereby, was \$297.20." *Id.* at 259. The court believed the business both "had no good will of any value" and that it had a patent application worth \$97.20; that court, at least, did not find the terms synonymous.

²⁹ This may be an example of the parties' intent shining through when that intent is contrary to the general understanding of a term used in business.

actions" to mean "all claims except claims for bad faith, unfair practices or violations of the Insurance Code." Under the circumstances presented here, we decline to rewrite appellants' release agreements to include a concept they failed to enunciate at the time they accepted the terms of the settlement with their insurer.

Edwards v. Comstock Ins. Co., 205 Cal. App. 3d 1164, 1167 (Cal. Ct. App. 1988). Similarly in this case, Plaintiffs urge the Court to read the phrase "said patents" to mean "said patents and an additional patent application," and/or the phrase "goodwill symbolized by said patents and applications and registrations thereof" to mean "goodwill symbolized by said patents and at least one additional patent application" or "goodwill, which includes patents and patent applications themselves and is symbolized by said patents as well as any continuation applications of said patents." The Assignment Agreement is on its face not reasonably susceptible to such proposed constructions, since they are in reality alterations or amendments.

4. Consideration of a "California Quantity" of Extrinsic Evidence

Neither the terms of the Assignment Agreement, nor the extrinsic evidence offered by IV, allow the Court to accept Plaintiffs' proposed interpretation of the Assignment Agreement. That proposal essentially boils down to this: (1) Alset *meant* to negotiate an agreement that included the '581 Patent's application; (2)(a) Alset *forgot*, when negotiating an agreement that explicitly lists every patent and application being conveyed, to include any reference to the '581 Patent's application, or alternatively, or (2)(b) Alset did not believe it needed to list that application, because it mistakenly believed that transfer of the parent patent would effect a transfer of the continuation child application; and as a result, (3) this Court should somehow read the '581 Patent's application into the Assignment Agreement because that was the subjective intent of one party to the Agreement.

Offered in support of those premises is (i) the declaration of Alset's co-founder saying he meant to own the '581 Patent's application by virtue of this Agreement. But as the moving Defendants point out, that Declaration does not aid the Court in understanding *AllAdvantage*'s intent as the *assignor* of rights. Dkt. No. 14-220, ECF No. 84, at 16. And even if it did, the language in the Agreement is not "reasonably susceptible" to that interpretation. *Pacific Gas*, 442 P.2d at 644; *Curry*, 48 Cal. Rptr. 2d at 631. Also offered in support is (ii) the deposition testimony of Lisa Benado, the attorney who prosecuted the '581 Patent's application. But the Court again agrees with Defendants—her recollection is based on what she believed her client's intent to be, not AllAdvantage's. The expressed intent of one party to an Agreement is not conclusive as to the other party's intent.

Lastly, IV offers (iii) evidence of actions taken after the parties executed the Assignment Agreement: (1) a Revocation of Prior Powers of Attorney, Power of Attorney by Applicant and Notification of Change of Fee and Correspondence Address filed in the prosecution of Patent Application No. 09/844/858 [the '581 Patent's application]; (2) a copy of the '581 Patent, which issued on February 11, 2003; (3) a copy of a Terminal Disclaimer filed in the prosecution of the '581 Patent's application; and (4) a copy of a fee transmittal form filed with regard to the '581 Patent's application. Dkt. No. 14-220, ECF Nos. 81-5–8. All of this evidence assertedly speaks to Alset's belief in its ownership, and that it held itself out as the owner of the '581 Patent after executing the Assignment Agreement.

Notwithstanding this, however, the Court simply cannot conclude that the Assignment Agreement is reasonably susceptible to an interpretation, by its terms, that it conveyed ownership of the '581 Patent's application. Had Plaintiffs provided evidence of AllAdvantage's intent aside from its decision to do nothing to assert a further ownership interest (which is admittedly, not

nothing), this might be a closer call. But even under California's wide-ranging "at least take a look at the parol evidence" rule, the evidence offered must be relevant to a reasonable interpretation of the plain terms of the Agreement—it cannot be only relevant to a request to insert further language into the written document. Even conditionally accepting and reviewing the extrinsic evidence offered by Plaintiffs, the Court concludes that it does not provide a reasonable alternative interpretation to the plain terms of the contract. Thus, the contract cannot be deemed ambiguous, and the extrinsic evidence is not admissible to aid in further interpretation.³⁰

Additionally, some extrinsic evidence more firmly supports Defendants' position than Plaintiffs'. For one thing, Mr. Hurley's Declaration, while stating he intended to obtain by this acquisition all assets he held in a different company, also states that he negotiated a previous assignment in the '581 Patent's chain of title. Dkt. No. 14-220, ECF No. 81-2, at ¶ 4. That previous assignment, negotiated by Mr. Hurley, specifically lists as part of the assets transferred, both the '983 Patent ('581 Patent's parent) and the '858 application ('581 Patent's application). Dkt. No. 14-220, ECF No. 76-4, at 8. Mr. Hurley did not seem to believe that transfers of parent patents automatically conveyed their child applications at that prior time, so why now? Moreover, Defendants point to the fact that the Assignment Agreement "expressly transferred three family applications of the '983 patent by name and patent number," but did not include the '581 Patent's application. Those child patent

³⁰ Because of this conclusion, the Court will deny Defendants' Motion to Strike Hearsay Declaration of Paul Hurley, Dkt. No. 14-220, ECF No. 82.

³¹ The Court considers this assertion to be extrinsic because it is not evident from the face of the Assignment Agreement. IV did not dispute assertions regarding inclusion of '983 Patent "family members," though it had the opportunity both in its Opposition and at oral argument.

applications must have been considered separate property that needed to be included in order to be transferred, or why would they be listed?³²

After appropriately considering the extrinsic evidence within the perhaps unique context of California law, along with the language of the Assignment Agreement, the Court concludes that the Agreement is not reasonably susceptible to any of IV's proposed interpretations. The relevant Assignment Agreement does not transfer the '581 Patent or its application. Thus, there was a break in the chain of ownership of the '581 Patent. This means that IV lacks standing to assert patent infringement claims based on it and the Court lacks subject matter jurisdiction to adjudicate its claims of its infringement. All such claims relating to the '581 Patent will therefore be dismissed without prejudice.³³

III. PATENT-INELIGIBLE SUBJECT MATTER CHALLENGE³⁴

Some iteration of this part of the case is being litigated daily (if not hourly) in federal courts across the country.³⁵ In the wake of *Alice Corp. Party Ltd. v. CLS Bank Int'l*, 134 S. Ct.

³² If this was in actuality a drafting error, that is regrettable, but it is a slippery slope for courts to allow themselves to be persuaded to implant additional language (and in this case, another piece of property) into a contract that expressly enumerates the other pieces of property it purports to convey.

³³ Even if IV had carried its burden to show ownership of the '581 Patent and thus to achieve standing, it would make no difference because the '581 Patent is also directed to an abstract idea ineligible for patent protection, as the Court explains in greater detail below. Because it is not out of the question that an appeal to the Federal Circuit lies ahead, this Court finds it prudent to address both the standing and patent-eligibility questions as to the '581 Patent.

³⁴ Courts and litigants label this challenge differently, with some describing it as a challenge to a patent's validity and others characterizing it as a threshold issue of patent eligibility, different from the affirmative defenses contained in other sections of the Patent Act. This Court labels the challenge as one dealing with whether the claims at issue are patent eligible. See DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245, 1259 n.6 (Fed. Cir. 2014) ("[P]atent-eligible does not mean patentable under, e.g., 35 U.S.C. §§ 102 and 103."); Chamberlain Group, Inc. v. Linear LLC, No. 14-5197, 2015 WL 4111456, at *6 n.2 (N.D. Ill. July 7, 2015) ("Patent eligibility does not mean patent ability under, e.g., 25 U.S.C. §§ 102 and 103. Defendant has not argued that the [patents] are invalid as anticipated by or obvious over prior art, nor have they argued that the claims at issue lack an adequate written description or are not enabled.") (emphasis in original).

³⁵ The Court can safely observe that some version of this part of the case is now playing out daily in courtrooms "from California to the New York island." Woody Guthrie, *This Land is Your Land* (Smithsonian Folkways Recordings 1997); *compare Enfish, LLC v. Microsoft Corp.*, No. 12-07360, 56 F. Supp. 3d 167 (C.D. Cal. 2014)

2347 (2014), the proverbial motions practice floodgates have opened and participants in patent actions who are charged with infringing software or other computer-related patents have moved at various procedural stages for rulings that the asserted patents are directed to patent-ineligible subject matter. See 35 U.S.C. § 101. Such litigants often attempt to frame patents at issue in the broadest terms available, analogizing the claims to age-old methods of organizing human activity which lack any inventive concept in attempts to bring the claimed subject matter within the scope of the Supreme Court's conception of unpatentable subject matter. And, as it turns out, many courts have agreed with them in the time since the Supreme Court decided Alice.

Parties asserting infringement, hoping to save their cases and pursue their infringement contentions,³⁶ argue that (1) the pleading stage is too early to consider whether the subject matter is patent eligible because there has not yet been discovery or claim construction; (2) representative claims are insufficient to assess patents under § 101 and courts undertaking the task must instead perform a claim-by-claim analysis; (3) a presumption of validity attaches to patents because the USPTO has approved them; and relatedly, (4) the standard for judging the issue is too high—clear and convincing evidence—for early adjudication. On substantive grounds, they also attempt to frame their patents as claiming solutions to computer-specific problems with no "brick and mortar" analogs in order to show they are similar to claims upheld by the Federal Circuit post-*Alice*.

All of these eligibility arguments *de jour* are presented in this case, at least to some extent, and the Court will address them as appropriate here. Because many of the arguments

with Intellectual Ventures II LLC v. JP Morgan Chase & Co., No. 13-3777, 2015 WL 1941331 (S.D.N.Y. Apr. 28, 2015).

³⁶ Or as noted by one Circuit Judge, to at least fend off any case-ending motions long enough to pursue settlement talks. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 719 (Fed. Cir. 2014) (Mayer, J., concurring) ("Given the staggering costs associated with discovery, '*Markman*' hearings, and trial, it is hardly surprising that accused infringers feel compelled to settle early in the process." (internal citation omitted)).

made both by IV and the Defendants revert to and then rely on first principles of § 101 jurisprudence, the Court concludes that it is necessary to consider the development of that case law at some length.

A. Legal Standard

Federal Rule of Civil Procedure 12(b)(6) provides for dismissal when a complaint fails to allege facts "sufficient to show that the plaintiff has a 'plausible claim for relief." *Fowler v. UPMC Shadyside*, 578 F.3d 203, 211 (3d Cir. 2009) (quoting *Ashcroft v. Iqbal*, 556 U.S. 662, 679 (2009)). Withstanding a motion to dismiss for failure to state a claim requires plaintiffs to "raise a reasonable expectation that discovery will reveal evidence of the necessary element[s]." *Thompson v. Real Estate Mortg. Network*, 748 F.3d 142, 147 (3d Cir. 2014). Assessing a complaint at the Motion to Dismiss stage requires courts to accept all "well-pleaded facts as true," but legal conclusions warrant no deference. *Fowler*, 578 F.3d at 210–11 (citing *Iqbal*, 556 U.S. at 677).³⁷

³⁷ An examination of the Complaints in these cases reveals that they plead few facts but plenty of conclusions. There is a debate as to whether the 35 U.S.C. § 101 inquiry on patent eligibility is looped in with invalidity defenses that must be proved by defendants by clear and convincing evidence, and whether the presumption of validity contained in 35 U.S.C. § 282 applies. See, e.g., Execware, LLC v. BJ's Wholesale Club, Inc., No. 14-233, 2015 WL 4275314, at *3 (D. Del. July 15, 2015) ("Some members of the United States Court of Appeals for the Federal Circuit have suggested that 'any attack on an issued patent based on a challenge to the eligibility of the subject matter must be proven by clear and convincing evidence[,]' CLS Bank Int'l v. Alice Co. Pty. Ltd., 717 F.3d 1269, 1304—05 (Fed. Cir. 2013) (Rader, J., concurring-in-part and dissenting-in-part), but at least one other member of that Court has come to the opposite conclusion, see Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709, 720—21 (Fed. Cir. 2014) . . . (Mayer, J., concurring), all of which has led to some uncertainty regarding the appropriate standard of proof in Section 101 cases."); Intellectual Ventures I LLC v. Symantec Corp., _ F. Supp. 3d __, Nos. 10-1067; 12-1581, 2015 WL 1843528, at *5 (D. Del. Apr. 22, 2015) ("Beyond [the principle that the § 101 inquiry is a question of law], there is no clarity at this time as to the standard of proof that must be applied to factual disputes that may be intertwined with the issue of eligibility of a particular patent or claim."); id. at *6 (collecting cases from district courts on both sides of the divide and concluding that the patents at issue were patent ineligible regardless of which standard applied).

That debate does not carry over to this lawsuit, however, because no Defendant contests that the presumption of validity and the clear and the convicting evidence standard apply. See Dkt. No. 14-220, ECF No. 47, at 13 (Erie and Highmark Defendants' opening brief assuming the attachment of the presumption of validity and the application of the clear and convincing evidence standard); Dkt. No. 14-220, ECF No. 97, at 59:18–23 (Old Republic Defendants' statement that presentation assumes the presumption applies); Dkt. No. 14-1130, ECF No. 31, at 10 n.3 ("Old Republic's argument is presented herein as if the 'clear and convincing evidence' standard somehow applies"); Dkt.

B. Patent Eligibility Pursuant to 35 U.S.C. § 101

35 U.S.C. § 101 authorizes the grant of a patent to anyone who "invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof. . . ." One exception to these general categories has been the focus of a great deal of litigation. That exception sounds simple: "[I]aws of nature, natural phenomena, and abstract ideas are not patentable." *Alice*, 134 S. Ct. at 2354. Specifically at issue here is whether the claims of three Patents involved here fall into the "abstract idea" category, ³⁸ and if they do, whether they contain sufficient limitations to transform them into claims for patent-eligible subject matter. So what exactly is an abstract idea? And what types of limitations are required to transform an abstract idea into patent-eligible subject matter?

The Supreme Court has instructed the lower courts to apply the following general framework:

(1) Are the claims at issue "directed to a patent-ineligible concept" (*i.e.*, a law of nature, natural phenomenon, or abstract idea)? ("Alice Step One")

If no, the claims are patent eligible. If yes, then courts are to ask:

(2) "[C]onsider[ing] the elements of each claim both individually and as an ordered combination," are there "additional elements" which present an "inventive concept" that "transform the nature of the claim into a patent-eligible application"

No. 14-220, ECF No. 56, at 20 (same). See DataTern, Inc. v. Microstrategy, Inc., No. 11-12220, 2015 WL 5190715, *7 (D. Mass. Sept. 4, 2015).

The Court will therefore assume that the patents at issue are presumptively valid and that the Defendants have the burden of demonstrating they are not directed to patent-eligible subject matter by clear and convincing evidence. The Court notes, however, that the clear and convincing standard also likely only applies to factual disputes which may underlie the § 101 analysis and not to the ultimate legal question. *Execuare*, 2015 WL 4275314, at *3.

³⁸ The parties do not dispute that the claims at issue fall into one of the statutory classes, but only whether the patent claims are drawn to an abstract idea. The Court will therefore so confine its analysis.

by demonstrating it is "significantly more than a patent upon the ineligible concept itself"? ("Alice Step Two")

Alice, 134 S. Ct. at 2355 (citing Mayo Collaborative Servs. v. Prometheus Labs., Inc., 566 U.S. – —, 132 S.Ct. 1289 (2012)) (internal quotation marks omitted). Claims which yield a "yes" answer to both questions are patent eligible, as are those which generate a "no" answer to the first question. Claims which yield a "yes" to question one, but a "no" to question two are not patent eligible.

Abstract ideas, a concept relevant to the first step, may be "preexisting, fundamental truth[s]" such as mathematical equations, and also encompass "method[s] of organizing human activity" or "longstanding commercial practice[s]" like intermediated settlement or risk hedging. Alice, 134 S. Ct. at 2356. It is important for courts to avoid overgeneralizing when conducting this inquiry, but they must also be cautious of hypersensitivity to technical language, as the inquiry is one of discerning the heart of the patented invention/true nature of the claim. Id. at 2355-57; Ultramercial, 772 F.3d at 714; Accenture, 728 F.3d at 1344; see also Tranxition, Inc. v. Lenovo (U.S.) Inc., No. 12-01065, 2015 WL 4203469, at *6 (D. Or. July 9, 2015) ("The first step of the Mayo/Alice analysis essentially requires the Court to ask: what are the claims generally trying to achieve?"); Enfish, LLC v. Microsoft Corp., 56 F. Supp. 3d 1167, 1173 (C.D. Cal. 2014) ("Courts should recite a claim's purpose at a reasonably high level of generality."). "This task is difficult, especially with regard to computer software. Because software is necessarily intangible, accused infringers can easily mischaracterize and oversimplify software patents." Enfish, 56 F. Supp. 3d at 1174 (quoting Oplus Techs. Ltd. v. Sears Holding Corp., No. 12-5707, 2013 WL 1003632, at *12 (C.D. Cal. Mar. 4, 2013), which states that "[a]ll software only 'receives data,' 'applies algorithms,' and 'ends with decisions.'" (emphasis in original)); see

also Enfish, 56 F. Supp. 3d at 1171 ("A basic truth is that algorithms comprise computer software and computer codes."). 39

The second step requires more than stating the abstract idea and adding the words "apply it," *Alice*, 134 S. Ct. at 2357, and must include additional features that amount to more than "well-understood, routine, conventional activity," *Mayo*, 132 S. Ct. at 1298. Preemption concerns are a central factor, as the second step is geared toward weeding out claims that would monopolize, or preempt, use of the abstract idea itself through artful drafting. *Alice*, 134 S. Ct. at 2357.

C. Relevant Supreme Court Precedent Through Alice

In order to assess the patent eligibility of the patents at issue here and to address the parties' enthusiastic arguments in those regards, it is necessary to place them in the context of the evolved legal principles applicable to the task.

In *Gottschalk v. Benson*, the Supreme Court held that a patent claiming a mathematical formula, ⁴⁰ which could be performed either by the human mind or by a computer, was drawn to patent-ineligible subject matter because it attempted to patent one of the "basic tools of scientific and technological work." 409 U.S. 63, 67 (1972). Drawing its analysis from numerous prior cases, a particularly salient explanation came in its description of *Cochrane v. Deener*, 94 U.S. 780 (1876). The patent at issue in that case claimed a process for manufacturing improved-quality flour. *Benson*, 409 U.S. at 69. As the Court reasoned in *Cochrane*:

If one of the steps of a process be that a certain substance is to be reduced to a powder, it may not be at all material what instrument or machinery is used to effect that object, whether a hammer, a pestle and mortar, or a mill. Either may be

³⁹ As compared, for instance, with the "tangible, industrial process" at issue in *Canrig Drilling Technology Ltd. v. Trinidad Drilling Ltd.*, No. 15-656, 2015 WL 5458576, at *4 (S.D. Tex. Sept. 17, 2015).

⁴⁰ "The patent sought is on a method of programming a general-purpose digital computer to convert signals from binary-coded decimal form into pure binary form." *Gottschalk v. Benson*, 409 U.S. 63, 65 (1972).

pointed out; but if the patent is not confined to that particular tool or machine, the use of the others would be an infringement, the general process being the same.

Id. at 70 (quoting Cochrane, 94 U.S. at 787–88). The Court went on to explain that "[t]ransformation and reduction of an article 'to a different state or thing' is the clue to the patentability of a process claim that does not include particular machines." Id. at 70. The Court also made plain its concerns regarding pre-emption: "The mathematical formula involved here has no substantial practical application except in connection with a digital computer, which means that . . . the patent would wholly pre-empt the mathematical formula and in practical effect would be a patent on the algorithm itself." Id. at 71–72.

Similarly, in *Parker v. Flook*, 437 U.S. 584 (1978), the Court held that a patent claiming "a formula for computing an updated alarm limit" during catalytic conversion processes in the petrochemical and oil refining industries is not patent eligible. *Id.* at 586. The patent's inclusion of "post-solution activity" (in the form of automatically adjusting the alarm limit after implementing the formula) was insufficient to render the claims patent eligible, because then "[a] competent draftsman could attach some form of post-solution activity to almost any mathematical formula" and preempt its use. *Id.* at 590. The Court held that "a claim for an improved method of calculation, even when tied to a specific end use, is unpatentable subject matter under § 101." *Id.* at 595 n.18.⁴¹

The Court contrasted the claims in *Benson* and *Flook* with those at issue in *Diamond v*.

Diehr to there hold that a "process for curing synthetic rubber which includes in several of its steps the use of a mathematical formula and a programmed digital computer is patentable subject matter." 450 U.S. 175, 177 (1981). The process there at issue addressed a specific problem in

⁴¹ The Court also stated that "[n]either the dearth of precedent, nor this decision, should . . . be interpreted as reflecting a judgment that patent protection of certain novel and useful computer programs will not promote the progress of science and the useful arts, or that such protection is undesirable as a matter of policy." *Id.* at 595.

the tire production industry—tires had previously been undercured or overcured because there was no way to measure the temperature inside a press without opening it. *Id.* at 177–78. The patented process provided for constant measurement of the temperature inside the mold, such measurements being automatically fed into a computer which used a mathematical equation to calculate the cure time and signal the computer to open the press at the optimal time. *Id.* at 179.

Unlike the claims at issue in *Benson* and *Flook*, which essentially purported to patent mathematical formulas themselves, the Court concluded that while the process in *Diehr* "admittedly employs a well-known mathematical equation, [it] do[es] not seek to pre-empt the use of that equation." *Id.* at 187. ⁴² Instead, the Court recognized that "[i]t is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection." *Id.* 187 (emphasis in original) (collecting cases). The *Diehr* Court also stressed the importance of considering the invention as a whole rather than dissecting its claims. *Id.* at 188. In addition, the Court described *Flook* as standing for the proposition that use of a mathematical formula (or other abstract idea) cannot be patented even if its use is limited to a "particular technological environment." *Id.* at 191, 192 n.14.

The Supreme Court's consideration of patent eligibility issues next came in *Bilski v. Kappos*, 561 U.S. 593 (2010). In *Bilski*, the claims purported to patent "both the concept of hedging [or protecting against] risk and the application of that concept to energy markets." *Id.* at 609. Aided by the analysis in *Benson*, *Flook*, and *Diehr*, the Court held that the involved patent

⁴² The Court continued:

Rather, they seek only to foreclose from others the use of that equation in conjunction with all of the other steps in their claimed process. These include installing rubber in a press, closing the mold, constantly determining the temperature of the mold, constantly recalculating the appropriate cure time through the use of the formula and a digital computer, and automatically opening the press at the proper time.

application was drawn to the fundamental economic concept of "hedging," and that the patent claims lacked patent eligibility because allowing such a patent "would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea." *Id.* at 611–12. Moreover, the claim limitations did no more than import "token postsolution components" or attempt to "limit[] an abstract idea to one field of use"—both of which the Court found insufficient in *Flook*. *Id.* at 612. Further, the "entire Court agree[d] that while the machine-ortransformation test is reliable in most cases, it is not the *exclusive* test" to determine patent eligibility. *Id.* at 613 (Stevens, J., concurring).

Then, in *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012), the Court unanimously held that process claims drawn to aiding doctors in determining the adequate dosage levels of certain drugs on autoimmune disease patients by applying natural laws⁴³ were not patent eligible. *Id.* at 1294. Explaining that claimed steps implementing the laws of nature must be more than "well-understood, routine, conventional activity previously engaged in by researchers in the field" to render them patent eligible, the Court held those at issue failed to do so, as they broke down to nothing more than directing the process to those who could administer the drugs and instructing that they "(1) measure (somehow) the current level of the relevant metabolite, (2) use particular (unpatentable) laws of nature (which the claim sets forth) to calculate the current toxicity/inefficacy limits, and (3) reconsider the drug dosage in light of the law." *Id.* at 1299.⁴⁴ The *Mayo* Court also explained that "to transform an unpatentable law of nature into a patent-eligible *application* of such a law, one must do more

⁴³ The laws of nature in the claims described "the relationships between the concentration in the blood of certain thiopurine metabolites and the likelihood that the drug dosage will be ineffective or induce harmful side-effects." *Id.* at 1294.

⁴⁴ "The upshot is that the three steps simply tell doctors to gather data from which they may draw an inference in light of the correlations." *Id.* at 1298.

than simply state the law of nature while adding the words 'apply it." *Id.* at 1294. Most importantly, the Court set out a two-step inquiry outlined above which courts must undertake when considering patents under § 101. The Court also described language in *Bilski*, explaining that while the machine-or-transformation test does not "trump[] the 'law of nature' exclusion," the test may be "an '*important and useful* clue' to patentability." *Id.* at 1303 (quoting *Bilski*, 130 S Ct. at 3225–27).

Finally, in *Alice*, a unanimous Supreme Court applied its holdings in these cases and held patents which "disclose a computer-implemented scheme for mitigating 'settlement risk'" ineligible for patent protection. 134 S. Ct. at 2351.⁴⁵ *Alice* emphasized the twin concerns which underlie patent law: (1) pre-emption and (2) protection. *Id.* at 2354–55.⁴⁶ As to the former, the

Alice, 134 S. Ct. at 2352 n.2.

Patent protection is, after all, a two-edged sword. On the one hand, the promise of exclusive rights provides monetary incentives that lead to creation, invention, and discovery. On the other hand, that very exclusivity can impede the flow of information that might permit, indeed spur, invention, by, for example, raising the price of using the patented ideas once created, requiring potential users to conduct costly and time-consuming searches of existing patents and pending patent

⁴⁵ The Court set out and analyzed the following method claim, which the parties agreed was representative:

[&]quot;A method of exchanging obligations as between parties, each party holding a credit record and a debit record with an exchange institution, the credit records and debit records for exchange of predetermined obligations, the method comprising the steps of:

[&]quot;(a) creating a shadow credit record and a shadow debit record for each stakeholder party to be held independently by a supervisory institution from the exchange institutions;

[&]quot;(b) obtaining from each exchange institution a start-of-day balance for each shadow credit record and shadow debit record;

[&]quot;(c) for every transaction resulting in an exchange obligation, the supervisory institution adjusting each respective party's shadow credit record or shadow debit record, allowing only these transactions that do not result in the value of the shadow debit record being less than the value of the shadow credit record at any time, each said adjustment taking place in chronological order, and

[&]quot;(d) at the end-of-day, the supervisory institution instructing on[e] of the exchange institutions to exchange credits or debits to the credit record and debit record of the respective parties in accordance with the adjustments of the said permitted transactions, the credits and debits being irrevocable, time invariant obligations placed on the exchange institutions."

⁴⁶ The *Mayo* Court also explicitly addressed these concerns:

Alice Court explained that if a patent's claimed subject matter would essentially grant a monopoly over the "basic tools of scientific and technological work" (i.e., laws of nature, natural phenomena, and abstract ideas), further innovation may be impeded. Alice, 134 S. Ct. at 2354. As to the latter, the Court instructed that the abstract ideas/laws of nature/natural phenomena exclusion must be carefully construed "lest it swallow all of patent law." Id. Since "[a]t some level, all inventions embody, use, reflect, rest upon, or apply" these excluded categories of subject matter, courts assessing claims against § 101 must "distinguish between patents that claim the building blocks of human ingenuity and those that integrate the building blocks into something more, thereby transforming them into a patent-eligible invention." Id. (internal quotation marks, citations, and alterations omitted).

The *Alice* Court concluded that (1) the claims at issue there were drawn to an abstract idea, intermediated settlement, *id.* at 2355, and (2) the claims included no "inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application," *id.* at 2357 (internal quotation marks and citations omitted). With regard to its conclusion at *Alice* Step One, the *Alice* Court analogized the idea of intermediated settlement to patent claims struck down in previous cases, reiterating that mathematical formulas (like *Benson*'s "algorithm for converting binary-coded decimal numerals into pure binary form" and *Flook*'s "mathematical formula for computing 'alarm limits' in a catalytic conversion process") and "fundamental economic practice[s]" (such as *Bilski*'s "basic concept of hedging, or protecting against risk") are the types of abstract ideas which are not patent eligible. *Id.* at 2355–56. While the Court explicitly

applications, and requiring the negotiation of complex licensing arrangements. At the same time, patent law's general rules must govern inventive activity in many different fields of human endeavor, with the result that the practical effects of rules that reflect a general effort to balance these considerations may differ from one field to another.

declined to "delimit the precise contours of the 'abstract ideas' category," it easily concluded the claims were within the same category of business practices as those in *Bilski*. *Id.* at 2357.

At Alice Step Two, the Alice Court concluded that the claims recited nothing more than instructions to "implement the abstract idea of intermediated settlement on a generic computer" because the steps directing a computer to "create electronic records, track multiple transactions, and issue simultaneous instructions" are "purely conventional" tasks performed by computers. Id. at 2359. Recognizing that the Alice Step Two inquiry incorporates the Court's pre-emption concerns, the Court reasoned that using a computer to "obtain data, adjust account balances, and issue automated instructions" did not change the analysis, as those functions are all "wellunderstood, routine, conventional activities previously known to the industry." Id. The Court distinguished *Diehr* from *Benson*, *Flook*, and *Mayo*, explaining that the mathematical equation in Diehr was not patented on its own, but was instead used "in a process designed to solve a technological problem in 'conventional industry practice.'" Id. at 2358. The Court further counseled that neither adding a generic computer along with the words "apply it," nor "limiting the use of an abstract idea to a particular technological environment," will transform an abstract idea into patent-eligible subject matter, id., but claims which "purport to improve the functioning of the computer itself" or "effect an improvement in any other technology or technical field" may withstand scrutiny. *Id.* at 2359.⁴⁷

⁴⁷ The Supreme Court issued its opinion in *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013) after *Alice*. In *Myriad Genetics*, the Court addressed the patent-eligibility of two types deoxyribonucleic acid (DNA), one that naturally occurred and one that was synthetically created. *Id.* at 2111. The Court held that the former, naturally occurring DNA was not patent eligible because it existed before Myriad found it and was not created, *id.* at 2117, while the latter was patent eligible because lab technicians "unquestionably create[]something new" when deriving it from the naturally occurring DNA. *Id.* at 2119.

D. The Post-Alice Legal Landscape

Shortly after the Supreme Court ruled in *Alice*, the Federal Circuit decided *Digitech Image Techs., LLC v. Electronics for Imaging, Inc.*, 758 F.3d 1344 (Fed. Cir. 2014). In *Digitech*, the court of appeals held that method claims "describ[ing] a process of organizing information through mathematical correlations" which was "not tied to a specific structure or machine" claimed an abstract idea. ⁴⁸ *Id.* at 1350. The court described the claim as "a process of taking two data sets and combining them into a single data set, the device profile." *Id.* at 1351. The abstract idea, a "process of gathering and combining data that does not require input from a physical device," could not withstand scrutiny under § 101 because it had no further limitations that would cover less than "any and all uses of a device profile." *Id.* The Federal Circuit explained that "[w]ithout additional limitations, a process that employs mathematical algorithms to manipulate existing information to generate additional information is not patent eligible." *Id.*

In *buySAFE*, *Inc.* v. *Google*, *Inc.*, 765 F.3d 1350 (Fed. Cir. 2014), the Federal Circuit held the claims there at issue were directed to the abstract idea of "creating a contractual relationship—a transaction performance guaranty," *id.* at 1355 (internal quotation marks and

combining said first and second data into the device profile.

Id. at 1351.

⁴⁸ The claim analyzed by the Federal Circuit provided:

^{10.} A method of generating a device profile that describes properties of a device in a digital image reproduction system for capturing, transforming or rendering an image, said method comprising:

generating first data for describing a device dependent transformation of color information content of the image to a device independent color space through use of measured chromatic stimuli and device response characteristic functions;

generating second data for describing a device dependent transformation of spatial information content of the image in said device independent color space through use of spatial stimuli and device response characteristic functions; and

⁴⁹ In summary, the claim was a method whereby a program receives a request for obtaining a transaction performance guaranty service involving an online commercial transaction, processes the request and underwrites the

citations omitted), which used a computer without "purport[ing] to improve the functioning of the computer itself," id. at 1354 (internal quotation marks and citations omitted). Concluding that the claims "do not push or even test the boundaries of the Supreme Court precedents under section 101," the Court of Appeals easily analogized the claims to the basic business practices the Supreme Court had invalidated in other cases. *Id.* at 1354–55. The court also referenced the concern that expansive patents will create a preemption problem that discourages innovation, id. at 1352–53, and noted that the exclusions from patent protection for laws of nature and abstract ideas apply even if a law or idea is narrow, id. at 1353.

Then, in Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709 (Fed. Cir. 2014), cert. denied sub nom. Ultramercial, LLC v. WildTangent, Inc., 135 S. Ct. 2907 (2015), the Federal Circuit addressed (at the motion to dismiss stage) a representative claim directed toward a method whereby consumers can watch copyrighted media products for free over the Internet in exchange for viewing an advertisement when the advertiser pays for the content. *Id.* at 712. The case had a long history of appellate review⁵⁰ and in its third opinion, the Federal Circuit held that a representative claim's "ordered combination of steps recites an abstraction—an idea, having no particular concrete or tangible form," and that "[a]lthough certain additional limitations, such as consulting an activity log, add a degree of particularity, the concept embodied by the majority of the limitations describes only the abstract idea of showing an advertisement before delivering free content." Id. at 715. Specifically addressing the machine-or-transformation test and holding

first party, and the transaction service provider offers the performance guaranty service that binds the party. Id. at 1352. The district court had described the idea as "a third party guarantee of a sales transaction" which was applied "using conventional computer technology and the Internet." Id. at 1352 (quoting buySAFE, Inc. v. Google, Inc., 964 F. Supp. 2d 331, 335–36 (D. Del. 2013)).

⁵⁰ After the district court dismissed the complaint, the Federal Circuit reversed, only to have that decision vacated and the case remanded by the Supreme Court, after which point the Federal Circuit reversed the district court again. and then once more had its decision vacated and the case remanded by the Supreme Court. Id. at 713.

it not satisfied, the Federal Circuit also stated that "[a]ny transformation from the use of computers or the transfer of content between computers is merely what computers do and does not change the analysis [and is insufficient]." *Id.* at 717.⁵¹

The Federal Circuit has also held ineligible four (4) patents which had been asserted against banks based on check deposit software in *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343 (Fed. Cir. 2014). On appeal from a grant of a Rule 12(b)(6) dismissal, the panel unanimously held that patent claims which "generally recite a method of 1) extracting data from hard copy documents using an automated digitizing unit such as a scanner, 2) recognizing specific information from the extracted data, and 3) storing that information in a memory" were patent-ineligible. *Id.* at 1345. The court concluded that the patents were directed toward the "abstract idea of 1) collecting data, 2) recognizing certain data within the collected data set, and 3) storing that recognized data in a memory," *id.* at 1347, and went on to explain that those concepts are "undisputedly well-known" and performed by humans in general and banks in particular "for some time." *Id.* 52

Concluding that the patents were abstract at *Alice* Step One since they were directed to the basic concepts of "data recognition and storage," *id.*, the *Content Extraction* court turned to *Alice* Step Two and concluded that none of the patents' limitations made them patent-eligible

In his concurring opinion, Judge Mayer wrote that (1) the § 101 inquiry is a threshold issue that should be addressed at the outset of litigation because it deals with whether "claimed subject matter is even *eligible* for patent protection before addressing questions of invalidity or infringement," *id.* at 718 (Mayer, J., concurring); (2) the presumption of validity should not apply to § 101 challenges "[b]ecause the PTO has for many years applied an insufficiently rigorous subject matter eligibility standard," *id.* at 720 (Mayer, J., concurring); and (3) the Supreme Court essentially articulated a "technological arts test" in *Alice* which requires claims to "harness natural laws and scientific principles . . . and use them to solve seemingly intractable problems" to be patent eligible, and must "not only describe a technological objective, but set out a precise set of instructions for achieving it," *id.* at 721–22 (Mayer, J., concurring).

⁵² The court also rejected the plaintiff's argument that "claims are not drawn to an abstract idea because human minds are unable to process and recognize the stream of bits output by a scanner," noting that a similar argument did not stop the Supreme Court from invalidating the computer-implemented claims at issue in *Alice*. *Id*. at 1347.

because they "merely recite the use of this existing scanning and processing technology to recognize and store data from specific data fields such as amounts, addresses, and dates," which involved nothing more than the use of generic computer components "to perform well-understood, routine, and conventional activities commonly used in industry." *Id.* at 1348. Attempts to limit the abstract idea to "a particular technological environment" were held insufficient. *Id.* Moreover, the court found it unnecessary to review each and every claim of the patent to make its determination, reasoning that (1) the district court's own analysis led it to conclude the representative claim sufficed because "all the claims are 'substantially similar and linked to the same abstract idea," (2) the plaintiff never opposed the designation of specific representative claims in the court below, and (3) the plaintiff failed to identify any other claims that "purportedly contain[ed] an inventive concept." *Id.* ⁵³ The court also dismissed the idea that courts are precluded from considering § 101 challenges at the pleading stage because there has not yet been discovery or claim construction. *Id.* at 1349. Rather, courts must simply construe the claims in favor of the plaintiff at the pleading stage to appropriately resolve the issue. *Id.*

The singular case from the Federal Circuit to uphold patent eligibility post-*Alice* is *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014). In a 2-1 decision, the majority described the patent claims as resolving the Internet-specific problem of merchant advertisers "lur[ing] the host website's visitor traffic away" by directing visitors from a host website to a merchant's website after clicking a link. *Id.* at 1248. The claims recognize when a link has been activated and retrieve data that maintains the "look and feel' of the host web page" while opening the merchant's website, allowing visitors to essentially view multiple pages open

⁵³ The court also rejected the plaintiff's argument that dependent claims recited additional steps that transformed the claims and made them patent-eligible. *Id*.

at once rather than being "transported to a third party's website." *Id.* at 1249–50, 1257.⁵⁴ The court focused on *Alice* Step Two, *id.* at 1257, and distinguishing past cases holding patent ineligible claims which "involve both a computer and the Internet," the court held these patents survived § 101 scrutiny because the "claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks," *id.* at 1257.⁵⁵

Distinguishing *Ultramercial*, the *DDR* court explained that "the claims at issue here specify how interactions with the Internet are manipulated to yield a desired result—a result that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink." *Id.* at 1258. Because the claims viewed together "recite an invention that is not merely the routine or conventional use of the Internet," and since those claims do not threaten preemption of "every application of the idea of increasing sales by making two web pages look the same," the court held the claims patent-eligible, ⁵⁶ as they created an inventive concept for remedying a problem unique to the Internet. *Id.* at 1259.

The *DDR* dissent by Judge Mayer posited that the patents "fail to meet the demands of section 101 because they describe a goal—confusing consumers by making two web pages look alike—but disclose no new technology, or inventive concept, for achieving that goal." *Id.* at 1264 (Mayer, J., dissenting) (internal quotation marks and citation omitted). Judge Mayer

The allegedly infringing system allows visitors on a "cruise-oriented (host) website" to click on a cruise advertisement, causing the system to "generate[] and direct[] the visitor to a composite web page that incorporates 'look and feel' elements from the host website and product information from the cruise line (merchant)." *Id.* at 1250.

⁵⁵ "Although the claims address a business challenge (retaining website visitors) [and "performance of an abstract business practice on the Internet or using a conventional computers" have been held patent-ineligible], it is a challenge particular to the Internet." *Id.* at 1257.

 $^{^{56}}$ The court did "caution . . . that not all claims purporting to address Internet-centric challenges are eligible for patent." *Id.* at 1258.

criticized the patents as "long on obfuscation but short on substance," as they include no more than generic computer elements which are "long-used in e-commerce." *Id.* Constraining an abstract idea's use to a "particular technological environment" does not necessarily transform it into patent-eligible subject matter. *Id.* at 1266. Lastly, his dissent focused on preemption concerns: "[t]he potential scope of DDR's patents is staggering, arguably covering vast swaths of Internet commerce." *Id.* at 1266.

In *OIP Technologies, Inc. v. Amazon.com, Inc.*, 788 F.3d 1359 (Fed. Cir. 2015), the Federal Circuit affirmed a grant of judgment on the pleadings on patent eligibility grounds, holding that patent claims directed to a "price-optimization method" which tested prices, gathered statistics on customer reactions, estimated outcomes based on that data, and automatically selected and offered a new price based on the outcome was similar to economic concepts held patent ineligible in the past. *Id.* at 1362–63. "[T]hat the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting," the court explained, "do not make them any less abstract. *Id.* (citing *buySAFE*, 765 F.3d at 1355; *Accenture*, 728 F.3d at 1345.). At *Alice* Step Two, the court saw only "conventional computer activities or routine data-gathering steps" that did not limit the scope of the claims.⁵⁷ *Id.* The court also observed that "relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible." *Id.* (citing *Alice*, 134 S.Ct. at 2359

⁵⁷ For instance, the court assessed one claim as follows:

[[]C]laim 1 recites "sending a first set of electronic messages over a network to devices," the devices being "programmed to communicate," storing test results in a "machine-readable medium," and "using a computerized system . . . to automatically determine" an estimated outcome and setting a price. Just as in *Alice*, "all of these computer functions are 'well-understood, routine, conventional activit[ies]' previously known to the industry." *Alice*, 134 S.Ct. at 2359 (quoting *Mayo*, 132 S. Ct. at 1294) (alterations in original); *see also buySAFE*, 765 F.3d at 1355 ("That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.").

("use of a computer to create electronic records, track multiple transactions, and issue simultaneous instructions" is not an inventive concept); *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (a computer "employed only for its most basic function . . . does not impose meaningful limits on the scope of those claims"); *cf. DDR Holdings*, 773 F.3d at 1258–59 (finding a computer-implemented method patent eligible where the claims recite a specific manipulation of a general-purpose computer such that the claims do not rely on a "computer network operating in its normal, expected manner")). ⁵⁸

In *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343 (Fed. Cir. 2015), the Federal Circuit affirmed the grant of a motion to dismiss as to a patent directed to "the [abstract] idea of retaining information in the navigation of online forms." *Id.* at 1348. The court used guidance from the patent's specification to determine whether additional features were "conventional," and agreed with the district court that limitations like "[a] computer-readable storage medium, comprising computer instructions for" were insufficient to provide an inventive concept, concluding that additional limitations "represent merely generic data collection steps or siting the ineligible concept in a particular technological environment." *Id.* at 1348—49.

Finally and most recently, the Federal Circuit upheld a district court's determination that claims at issue were not patent eligible in *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363 (Fed. Cir. 2015). In *Capital One*, the Federal Circuit held claims directed to budgeting claimed an abstract idea.⁵⁹ At *Alice* Step Two, the Federal Circuit noted that

A method comprising:

⁵⁸ In a concurring opinion, Judge Mayer noted that "we have repeatedly sanctioned a district court's decision to dispose of them on the pleadings." *Id.* at 1365 (Mayer, J., concurring).

⁵⁹ The representative claim analyzed was:

"claiming the improved speed or efficiency inherent with applying the abstract idea on a computer [does not] provide a sufficient inventive concept." *Id.* at 1367. It held that claim elements such as a database, user profile, and a communication medium were all "generic computer components." Addressing a second patent, ⁶⁰ the court similarly held patent ineligible claims directed to "customizing web page content as a function of navigation history and information known about the user." *Id.* at 1371. That patent claimed an "interactive interface," which Intellectual Ventures had argued was a "specific application of the abstract idea that provides an inventive concept." *Id.* at 1370.

The Federal Circuit disagreed, explaining that "nowhere does Intellectual Ventures assert that it invented an interactive interface that manages web site content. Rather, the interactive interface limitation is a generic computer element," specifically a "a generic web server with attendant software, tasked with providing web pages to and communicating with the user's

storing, in a database, a profile keyed to a user identity and containing one or more user-selected categories to track transactions associated with said user identity, wherein individual user-selected categories include a user pre-set limit; and

causing communication, over a communication medium and to a receiving device, of transaction summary data in the database for at least one of the one or more user-selected categories, said transaction summary data containing said at least one user-selected category's user pre-set limit.

Id. at 1367.

⁶⁰ A representative claim for that patent states:

A system for providing web pages accessed from a web site in a manner which presents the web pages tailored to an individual user, comprising:

an interactive interface configured to provide dynamic web site navigation data to the user, the interactive interface comprising:

a display depicting portions of the web site visited by the user as a function of the web site navigation data; and

a display depicting portions of the web site visited by the user as a function of the user's personal characteristics.

Id. at 1369.

computer."⁶¹ *Id.* The Federal Circuit endorsed the district court's description that the claim elements do not confer patent eligibility because they "consist[] of nothing more tha[n] the entry of data into a computer database, the breakdown and organization of that entered data according to some criteria, . . . and the transmission of information derived from that entered data to a computer user, all through the use of conventional computer components, such as a database and processors, operating in a conventional manner." *Id.* at 1371. Distinguishing *DDR*, the Federal Circuit further explained that "[t]he patent at issue in *DDR* provided an Internet-based solution to solve a problem unique to the Internet that (1) did not foreclose other ways of solving the problem, and (2) recited a specific series of steps that resulted in a departure from the routine and conventional sequence of events after the click of a hyperlink advertisement." *Id.* The court concluded that the problems addressed in this case were not unique to the Internet, so *DDR* did not apply. *Id.*

The Court will now assess the pending Motions in the context of this body of authority, but first must address IV's procedural arguments, which are common to its presentations as to each Patent.

E. Plaintiffs' Procedural Arguments

As an initial matter, IV's arguments can be broken down into procedural and substantive categories. On the procedural end, IV asserts that the Court should not even conduct the § 101 inquiry because the case is not adequately teed up for such analysis. In addition to arguing that Defendants bear a heightened burden of proof to rebut the presumption of validity, IV also argues that (1) claim construction is necessary before the Court can resolve any issues under § 101, and (2) courts cannot rely on representative claims when conducting the § 101 analysis but must instead review each and every individual claim. Dkt. No. 14-220, ECF No. 52, at 16–20.

⁶¹ This type of claim element appears to the Court to be similar to the "mobile interface" claimed in the '002 Patent.

As to the latter argument, the Federal Circuit has held it permissible to assess representative claims when conducting the § 101 inquiry. Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343, 1348 (Fed. Cir. 2014); Ultramercial, 772 F.3d at 712. Recognizing that the Plaintiffs in this case oppose the designation of representative claims and insist on a claim by claim, fully Markman-ized analysis, this Court has reviewed the claims in the involved Patents and concludes that the representative claims set forth below are "substantially similar and linked to the same abstract idea" and further notes that Plaintiffs have failed to identify any other claims that "purportedly contain an inventive concept." See Content Extraction, 776 F.3d at 1348; Pragmatus Telecom, LLC v. Genesys Telecommunications Labs., Inc., F. Supp. 3d. , No. 14-26, 2015 WL 4128963, at *4 (D. Del. July 9, 2015) ("The Federal Circuit has held that the district court is not required to individually address claims not asserted or identified by the non-moving party, so long as the court identifies a representative claim and 'all the claims are substantially similar and linked to the same abstract idea.' (internal citation omitted)).⁶² Moreover, the § 101 analysis "is the same regardless of claim type, i.e., method claim, system claim, computer readable medium claim, etc." Trading Techs., Inc. v. COG, Inc., No. 05-4811, 2015 WL 774655, at *1 (N.D. Ill. Feb. 24, 2015); Amdocs (Israel) Ltd. v. Openet Telecom, Inc., 56 F. Supp. 3d 813, 820 (E.D. Va. 2014) (explaining that in Alice, Mayo, and Bilski, "the Supreme Court found that various claim types (method, system, etc.) directed to the same invention should rise and fall together"); see Novo Transforma Techs., Inc. v. Sprint Spectrum, L.P., No. 14-612, 2015 WL 5156526, *2 (D. Del. Sept. 2, 2015).

As to the former argument, the Federal Circuit seems to have concluded that claim construction is desirable, unless in reviewing the patents at issue, a district court concludes that it

⁶² While Plaintiff opposes the use of representative claims, it has identified no claim that is distinguishable in any material way, or the consideration of which would yield a different result.

isn't. Compare Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.), 687 F.3d 1266, 1273–74 (Fed. Cir. 2012) (explaining that it "will ordinarily be desirable—and often necessary—to resolve claim construction disputes prior to a § 101 analysis, for the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter"), with OIP Technologies, Inc. v. Amazon.com, Inc., 788 F.3d 1359 (Fed. Cir. 2015) (affirming grant of judgment on the pleadings of ineligibility) and Content Extraction, 776 F.3d at 1345 (upholding dismissal of the complaint based on ineligibility determination at the Rule 12(b)(6) stage without claim construction). If a court concludes that "the basic character of the subject matter is 'readily ascertainable from the face of the patent,'" it may conduct the § 101 inquiry without first construing the claims. Microstrategy Inc. v. Apttus Corp., No. 15-21, 2015 WL _____, at *1 n.4 (E.D. Va. July 17, 2015) (quoting Cardpool, Inc. v. Plastic Jungle, Inc., No. 12-04182, 2013 WL 245026, at *4 (N.D. Cal. Jan. 22, 2013).

In considering the patents at issue here, the Court concludes that claim construction is not necessary prior to conducting the § 101 inquiry. First, Federal Circuit precedent does not mandate that approach, but instead counsels that it is generally desirable only when needed to understand the basic character of the claimed subject matter. *Bancorp Servs.*, *L.L.C.* 687 F.3d at 1273–74. If the Court can divine the requisite understanding without claim construction, as the Court can here, claim construction is not required.

Second, the terms that might need to be construed in this case are largely defined in the Patents, and those definitions amount to "little more than synonyms for generic conventional computer processing steps," *Tranxition*, 2015 WL 4203469, at *12, or conventional computer components. For instance, in the '581 Patent, any definitional confusion regarding terms such as "discovery agent" or "discovery rule" is resolved within the text of the Patent: discovery rules

"may be a series of Boolean operations, mathematical equations, or other comparisons or evaluations of the collected data," that "determine what, if any, action is to be taken based on the collected data," *id.* at 2:4–6; 3:17–18, and discovery agents are "separate programs (or code sequences)" that "collect information about a device or its user," '581 Patent, at 1:65–2:4; 3:22–25.

Third, as was the case in *Content Extraction*, to the extent that the Court would identify a "factual dispute" during the course of the Court's analysis that was outcome-determinative, the Court would resolve any such dispute in the Plaintiffs' favor at this procedural stage. 776 F.3d at 1349.

Fourth, and bearing on the last point, Plaintiffs had ample time in their extensive briefing and during the marathon oral argument to the Court to identify any claim terms they believed required construction and to then proffer preferred constructions to the Court. They did not do that. While Plaintiffs have generally referenced terms that they thought may require construction, Dkt. No. 14-220, ECF No. 52, at 19, they have not proffered any proposed constructions or explained how any proposed construction would affect the analysis, see Cyberfone Sys., LLC v. CNN Interactive Grp., Inc., 558 F. App'x 988, 991 n.1 (Fed. Cir. 2014) ("Cyberfone argues that claim construction must precede the § 101 analysis, but does not explain which terms require construction or how the analysis would change."); Uniloc USA, Inc. v. E-MD, Inc., No. 14-625, Doc. No. 315, at 5 (E.D. Tex. Aug. 19, 2015) (explaining that where the plaintiff failed to identify any constructions defendants put forth or offer evidence affecting constructions, the court would not "endorse a rule that a § 101 motion can only precede claim construction with a patentee's blessing"); Boar's Head Corp. v. DirectApps, Inc., No. 14-01927, 2015 WL 4530596, at *7 (E.D. Cal. July 28, 2015) ("Although it is defendants' burden to show

ineligibility, a court should look to the plaintiff to show some factual dispute requiring claim construction."); *DietGoal Innovations LLC v. Bravo Media LLC*, 33 F. Supp. 3d. 271, 289 (S.D.N.Y. July 8, 2014) (concluding that when patent claims are "sufficiently straightforward," no formal claim construction is required to understand their content).

Because the Court concludes that it is proper to proceed with the § 101 analysis without *Markman* claim construction, and having addressed and resolved IV's procedural arguments, the Court will now address the Defendants' substantive challenges to the Patents at issue.

F. The '581 Patent⁶³

1. Claims and Description of the '581 Patent

The'581 Patent, entitled "Collection of Information Regarding a Device or a User of a Device Across a Communication Link," includes the following representative claims:

- 1. A method of collecting information, the method comprising:
 transmitting a discovery rule across a communication link to a computer
 system, wherein the discovery rule is to be applied to data about the
 computer system or a user to generate information, and wherein the data is
 collected by a discovery agent located in the computer system, and
 receiving the information from the computer system.
- 11. In a computer system, method of collecting information comprising:
 receiving a discovery rule across a communication link from a sender,
 applying the discovery rule to data about the computer system or a user to
 generate information, and wherein the data is collected by a discovery
 agent located in the computer system when the discovery agent is
 activated and without requiring action by the user; and communicating
 the information across the communication link back to the sender of
 the discovery rule.

These two claims show the method from both sides: while both are drawn to "a method of collecting information," one contains the steps which occur on the "sending" end and the other deals with the "receiving" and responding end. The Court concludes that these claims are

⁶³ As noted above, this Court has concluded that IV lacks standing to assert an infringement claim as to the '581 Patent. Because this Court cannot rule out the possibility that this is not the last court which will consider these matters, it believes it appropriate to set out its § 101 analysis as to the '581 Patent as well.

representative because the other independent claims are "substantially similar and linked to the same abstract idea" as that of the representative claims. *Content Extraction*, 776 F.3d at 1348; *Ultramercial*, 772 F.3d at 712. Those additional independent claims lack material differences: Claim 20 only contains the additional features of describing one way to prompt the transmission of a discovery rule ("a user request"), noting that a discovery agent may be automatically activated "without requiring action by the user," and the post-solution step of "providing the user with a response to the user request." Claims 29 and 39 are essentially the same as Claims 1 and 11, except that they include the use of a "computer readable medium having stored therein a plurality of sequences of executable instructions, which, when executed by a processor, cause the system to" perform the method set forth in the other Claims.

2. Analysis of the '581 Patent

The Erie and Highmark Defendants argue with regard to *Alice* Step One that the '581 Patent "contemplates [both] broad and trivial uses" of the abstract idea of "collecting information regarding a device or a user of a device." Dkt. No. 14-220, ECF No. 47, at 16. The Old Republic Defendants also contend that the Patent claims an abstract idea, characterizing that idea as "[c]ollecting information across a network and applying a predetermined rule to the collected information to make a decision." Dkt. No. 14-1130, ECF No. 31, at 5. Plaintiffs counter that contrary to Defendants' interpretation, the '581 Patent is in fact not directed to an abstract idea, but instead "to a computer system in which a discovery agent—a specific computer process—residing on a computer system collects computer data using a different computer program or code segment, known as a discovery rule." Dkt. No. 14-220, ECF No. 52, at 20. Arguing that the claims are drawn to "concrete computer technology" including "a computer-readable

medium," IV contends that the claims are patent eligible under *Alice*. *Id*. (citing '581 Patent, at Claim 29).

Further, IV attempts to distinguish the patents at issue in *Digitech*, *buySAFE*, *Accenture*, and *Alice*, arguing that those patents fell within a narrow class of recognized "abstract legal, business, and economic ideas," as well as one "drawn to a mathematical process that combined two data sets where (1) the process did not require any input from a physical device and (2) nothing in the claim tied the process to a computer processor." *Id.* at 21–22; *see also* Dkt. No. 14-220, ECF No. 91, at 7 (Oral Argument Presentation Slide describing abstract idea categories as (i) "Methods of Conducting Business"; (ii) "Managing Financial and Legal Relationships"; (iii) "Mathematical Equations"; and (iv) "Ideas Upon Themselves," and non-abstract idea categories as (i) "Specific Machines"; (ii) "Improvements to Existing Technological Processes"; and (iii) "Solutions Necessarily Rooted in Computer Technology to Overcome a Technological Problem").

Claim 1 recites a method for collecting information by (1) transmitting a discovery rule, which is essentially any code sequence, across a communication link, which is essentially any type of network; and (2) applying the code sequence to data about a computer system; in order to (3) generate information that is collected by a different code sequence, a "discovery agent"; and (4) receiving the information from the computer system.

Claim 11 recites the complementary method of (1) receiving a discovery rule, or code sequence, across a communication link, or any network; (2) applying the code sequence to data about a computer system or a user; in order to (3) generate information that is collected by a different code sequence, a "discovery agent," when that code sequence is activated without

prompting by a user; and (4) sending the information back across the network to the sender of the discovery rule.

Considering the '581 Patent as a whole, the Court concludes that the idea at the "heart" of the Patent, Ultramercial, 772 F.3d at 714, or "what the claimed invention is trying to achieve," Enfish, 56 F. Supp. 3d at 1173, is a method for performing the abstract idea of gathering, storing, and acting on data based on predetermined rules. This is similar to the patent claims that courts have concluded are directed to longstanding, well-known methods of organizing human activity. See, e.g., Capital One, 792 F.3d at 1367 (holding claims directed to "storing, in a database," a user identity with pre-selected rules and limits and "causing communication, over a communication medium and to a receiving device," containing information based on a pre-set limit were directed to the abstract idea of budgeting); Content Extraction, 776 F.3d at 1347 (holding patent ineligible claims directed toward the "abstract idea of 1) collecting data, 2) recognizing certain data within the collected data set, and 3) storing that recognized data in a memory"); Digitech, 758 F.3d at 1351 ("[A] process that employs mathematical algorithms to manipulate existing information to generate additional information is not patent eligible."); Accenture, 728 F.3d at 1344 (holding patent-ineligible claims directed toward the idea of "generating tasks [based on] rules . . . to be completed upon the occurrence of an event").

Indeed, the Patent merely claims use of mathematical formulas (and is not even limited to *specific* mathematical formulas) and networked computers to "generate information" and then make decisions based on that information. Using mathematical equations or code sequences (which are unlimited and unspecified) called "discovery rules" and "discovery agents" and implementing those code sequences on a generic computer does not make the underlying idea to which the Patent is directed any less abstract.

Nevertheless, even claims drawn to abstract ideas may be patent-eligible if they contain a sufficient "inventive concept" that would make the claimed material significantly more than a patent on the abstract idea itself. Alice, 134 S. Ct. at 2355. On Alice Step Two, the Erie and Highmark Defendants argue that the abstract idea is implemented "using one or more pieces of software called 'discovery agents,'" which collect the information and then use "other software called 'discovery rules'" to "dictate whether some action should be performed based on that information." Dkt. No. 14-220, ECF No. 47, at 16. An example of this Patent's application highlighted by Defendants is that a discovery agent will collect information about a user's computer, such as the available disk space, and a discovery rule will use that collected information to determine if the available disk space is running low, and generate a warning to the user if appropriate. Id. (citing '581 Patent, at 4:64-5:11). Defendants contend that "the alleged invention is embodied entirely in conventional computing components, such as 'any type of computer, including a general purpose computer." Id. (citing '581 Patent, at 10:13-14). More specifically, Defendants point to language in the Patent referring to typical computer components including "a client and a server," "a storage mechanism," and a generic "communication link." Id. They also explain that discovery rules "may be as simple as []conventional algorithm[s]," and that both discovery rules and discovery agents "are mere 'code sequences'—i.e., ordinary computer software." Id.

The Old Republic Defendants also point out that a discovery rule can be any "comparison or evaluation of the collected data," Dkt. No. 14-1130, ECF No. 31, at 10 (citing '581 Patent, at 3:19–21), and the Patent's application is not limited in any meaningful way, but can instead collect data on "wide ranging examples" spanning from "the font size used in windows that display text; or the user's hobbies, gender, or vacation preferences," *id.* at 11 (citing '581 Patent,

at Fig. 3). Defendants specifically compare Claim 1 of the '581 Patent to the claim held inadequate in *buySAFE*, 765 F.3d 1350, arguing it is similar to a claim "whereby a computer received a request for information over a computer network, processed that request, and sent information back." Dkt. No. 14-1130, ECF No. 31, at 11.

On the other hand, Plaintiffs state:

While the invention can be implemented on a general-purpose client and server computers, '581 Patent, [at 10:12–14], the programming of those computers to perform the claimed computer data transmission and collection methods places enough of a limit on the claims such that they do not preempt all uses of an abstract idea—the specific software disclosed and claimed in the '581 Patent is a technological innovation.

Dkt. No. 14-220, ECF No. 52, at 22–23. IV also argues that the claims satisfy the machine-or-transformation test, as they are "expressly tied to a networked computer system and, via the specific claimed software, transform a general computer into a special purpose computer." *Id.* at 21 (citing *Aristocrat Techs. Austral. Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008)).

The Court concludes that the '581 Patent is extraordinarily broadly drawn. The terms of the Patent itself indicate that "the invention may be practiced without these specific details." '581 Patent, at 2:67–3:1. But in discussing some details, the Patent also states that a "communication link can be any type of communication link using any type of communication medium," describing only one particular embodiment as coupling the client and server "across a network, such as a local area network (LAN), a wide area network (WAN), or the Internet," *id.* at 5:20–25; "[t]he computer system [shown in a particular figure] may be any type of computer, including a general purpose computer," *id.* at 10:13–15; and "[t]he computer-readable medium may be any type of magnetic, optical, or electrical storage medium including a diskette, magnetic tape, CD-ROM, memory device, or other storage medium," *id.* at 10:52–55.

Additional limitations, while adding "a degree of particularity," do not change the fact that the "concept embodied by the majority of the limitations describes only [an] abstract idea." Ultramercial, 772 F.3d at 715. Discovery rules and discovery agents are also very broadly defined in the Patent, see '581 Patent at 3:19–25 ("[D]iscovery rules may be a series of Boolean operations, mathematical equations, or other comparisons or evaluations of the collected data"; discovery agents are separate programs (or code sequences) from the discovery rules, and there is no particular relationship between the discovery agents and the discovery rules"), and themselves fall into the category of subject matter the Supreme Court declared patent ineligible in Benson and Flook. See Benson, 409 U.S. at 67 (mathematical formula, which could be performed either by the human mind or by a computer, was drawn to patent-ineligible subject matter because it attempted to patent one of the "basic tools of scientific and technological work."); Flook, 437 U.S. at 586 (holding patent claiming "a formula for computing an updated alarm limit" during catalytic conversion processes in the petrochemical and oil refining industries is not patent eligible). Indeed, there is not even a limit on the number of mathematical formulas claimed in the '581 Patent. Moreover, using the data gathered to trigger some type of system response is the same type of "post-solution activity" rejected in Flook as insufficient to transform the idea into patent-eligible subject matter. 437 U.S. at 590.

IV points to language contained in the Patent's specification and figures in an effort to salvage the Patent, arguing that terms like "modules" and "discovery engine" are "specific computer process[es]." Dkt. No. 14-220, ECF No. 52, at 20 (a "discovery engine" apparently connects discovery agents to discovery rules and "modules" are "specific computer programs which reside within the discovery engine" and perform various functions). But these terms do not save the Patent for two reasons: first, because they also do not appear to be any more limited

in scope than terms such as "discovery agent" and "discovery rule"; second, they are not referenced anywhere inside the Patent claims themselves, but are only included in the specification. It is the Patent claims which must contain sufficient limitations to provide an inventive concept to an abstract idea, and while the specification may be useful in informing a court's understanding of the claims, *see Internet Patents Corp.*, 2015 WL 3852975, at *5 (using specification to determine that terms were conventional); *BASCOM*, 2015 WL 2341074, at *15 (using specification to conclude that "filtering schemes are merely 'any type of code which may be executed."), the Court may not import details from the specification and then call them limitations on the claims, *see Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1334 (Fed. Cir. 2012) ("In considering patent eligibility under § 101, one must focus on the claims. This is because a claim may 'preempt' only that which the claims encompass, not what is disclosed but left unclaimed.").

The '581 Patent lays out a broad method, and in doing so, it claims and thus seeks to preempt the other use of nearly any code sequence or mathematical equation transmitted over any communication network and applied to any data set to trigger pretty much any response. While the '581 Patent states that one example of a "particular discovery rule" in action would be to "generate a warning to the user . . . if the available disk space or available memory falls below a particular threshold," '581 Patent, at 4:63–67, that is only one particular action that could be performed by one particular discovery rule—and there are a seemingly infinite (or perhaps at least a really enormous and wholly undetermined and undeterminable) number of others also encompassed in the claim language, and each is merely transmitted, applied to data, and sent back across the communication link. *Cf. Intellectual Ventures II LLC v. JP Morgan Chase & Co.*, No. 13-3777, 2015 WL 1941331, at *13 (S.D.N.Y. Apr. 28, 2015) (explaining a patent's

preemptive effect and pointing out that "[t]he claims apply to the application of *any* pre-selected access rule" and are "executable on virtually *any* digital device") (emphasis in original).

Where the claims are so "exceptionally broad and the computer implementation limitations do so little to limit their scope," they are simply not patent eligible. OIP Techs., Inc. v. Amazon.com, Inc., 788 F.3d 1359, 1363 (Fed. Cir. June 11, 2015) ("Indeed, the specification makes clear that this "programming" and the related computer hardware "refers to any sequence of instructions designed for execution on a computer system."); see also Affinity Labs of Texas, LLC v. DirecTV, LLC, F. Supp. 3d __, No. 15-0030, 2015 WL 3764356, at *27 (W.D. Tex. July 7, 2015) (concluding the patent at issue monopolized "the dissemination of regionally broadcasted content to a user outside the region on an electronic device that utilizes cellular communication" partially because of "the scope of the definition in the specification"). And again, the inclusion in some of the claims of "a computer-readable medium", '581 Patent, at Claim 29, also does not change the analysis. OIP Techs., 788 F.3d at 1363 (holding patentineligible claims which included "storing test results in a 'machine-readable medium," because that and other limitations only "require[ed] conventional computer activities or routine datagathering steps" which did not transform the abstract idea of "offer-based price optimization" into an inventive concept); Internet Patents Corp. v. Active Network, Inc., 790 F.3d. 1343, 1348—49 (Fed. Cir. 2015) ("The statement that the method is performed by computer [for a claim using a "computer-readable storage medium"] does not satisfy the test of 'inventive concept.' (internal citation omitted)); CyberSource Corp. v. Retail Decisions, Inc., 654 F.3d 1366, 1374 (Fed. Cir. 2011) ("CyberSource contends that, by definition, a tangible, man-made article of manufacture such as a 'computer readable medium containing program instructions' cannot possibly fall within any of the three patent-eligibility exceptions We disagree.").

Prior to oral argument, IV filed a supplemental brief addressing what it says are the implications of the Federal Circuit's decision in *DDR*. Dkt. No. 14-220, ECF No. 55.⁶⁴ Plaintiffs argue that the *DDR* Court held the claims patent eligible under both prongs of the *Alice* test: those claims were not directed to abstract ideas, and even if so, they contained sufficient limitations to transform them into patent-eligible subject matter. *Id.* at 4–5. IV sought to illustrate the similarities between their Patents and the claims at issue in *DDR* during oral argument. Its counsel focused specifically on the assertion that the '581 Patent solved "software problems," including the time consuming nature of making changes to built-in diagnostic routines in software, and the previously non-automated manner in which the applications ran. Dkt. No. 14-220, ECF Nos. 97, at 102:1–23; 91, at 9–11.

As a preliminary matter, the Court disagrees with IV's reading of the Federal Circuit's opinion in *DDR*. Although Plaintiffs assert that the court there held the claims at issue were not drawn to an abstract idea, *see* Dkt. No. 14-220, ECF No. 55, at 4 ("[T]he Court held that the challenged claims were not directed to an abstract idea."), this Court sees no such holding in the opinion. Instead, the Federal Circuit discussed general categories of abstract ideas, noted that the claims at issue presented challenges in "identifying the precise nature of the abstract idea," and then ultimately declined to address *Alice* Step One, concluding that "under any of these

⁶⁴ Plaintiffs' brief was not limited to discussion of the '581 Patent but argued that *DDR* similarly applies to the '434 and '002 Patents as well.

⁶⁵ To the extent the Federal Circuit addressed the patent with regard to *Alice* Step One, it merely explained that it did not fall within certain categories of abstract ideas such as "longstanding commercial practice[s]" or "mathematical algorithm[s]." *DDR Holdings*, 773 F.3d at 1257; *see BASCOM*, 2015 WL 2341074, at *11 ("[T]o the extent the *DDR Holdings* court analyzed whether the subject claims were directed toward an abstract idea, it did so by exclusion."). This definition by exclusion is only of limited help when comparing it to other patents, when the Court did not go so far as to say the patent was not directed to an abstract idea. The Court recognizes that "[d]istrict courts have disagreed as to whether *DDR Holdings* should be read as having concluded that the claim at issue there was not directed to an abstract idea under step one of *Alice*, or whether the decision was solely intended to convey that, pursuant to step two of *Alice*, the claim amounted to a patent-eligible application of an abstract idea." *Execware*, *LLC v. BJ's Wholesale Club, Inc.*, No. 14-233, 2015 WL 4275314, at *10 n.14 (D. Del. July 15, 2015) (collecting cases on each side of the debate).

characterizations of the abstract idea, the '399 patent's claims satisfy *Mayo/Alice* step two." *DDR Holdings*, 773 F.3d at 1257; *see also BASCOM Global Internet Servs., Inc. v. AT & T Mobility LLC*, __ F. Supp. 3d __, No. 3:14-CV-3942-M, 2015 WL 2341074, at *11 (N.D. Tex. May 15, 2015) ("[T]he Federal Circuit did not decide in *DDR Holdings* whether the composite web page at issue was directed toward an abstract idea.").

That said, DDR offers guidance with regard to Alice Step Two. The Federal Circuit upheld the claims under § 101 because they "claimed [a] solution [that] is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." DDR Holdings, 773 F.3d at 1257. Not only that, but the claims also "specify how interactions with the Internet are manipulated to yield a desired result—a result that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink." Id. at 1258. Another district court within this Circuit has interpreted these requirements as calling for an inquiry into whether "the invention of . . . certain computer technology created the problem at hand [and] [i]f the court can point to a brick and mortar analog to the problem at issue, the computerized solution will not suffice to make the patent eligible under § 101." Source Search Techs., LLC v. Kayak Software Corp., F. Supp. 3d ___, No. 11-3388, 2015 WL 3980628, at *7 (D.N.J. July 1, 2015). The same court also stated that "DDR Holdings tells us that when a patent holder seeking to establish § 101 eligibility for an otherwise abstract idea points to a particular element of a patent's claims as solving a computer-centric problem, the claims must specify how that solution works. That specificity removes the claims from the abstract realm." Id. at *12 (emphasis in original).

Although IV attempts to point out specific "software problems" addressed by the '581 Patent, that argument alone is insufficient to hold a claim patent eligible. *See BASCOM*, 2015

WL 2341074, at *2 (holding patent-ineligible claims for an "invention designed to overcome the disadvantages in the single-user, local server-based, and server-based configurations by providing individualized, customizable filtering and data storage on the ISP server"). Patent claims cannot simply address a problem on a computer, but must somehow change or improve the computer itself, Alice, 134 S. Ct. at 2359, without also claiming too much and thus preempting use of the abstract idea, Enfish, 56 F. Supp. 3d at 1174-75 ("Patents that claim inventions too broadly or prohibit a vast amount of future applications are suspect." (citing Benson, 409 U.S. at 68; O'Reilly v. Morse, 56 U.S. 62, 113 (1853))). As the court cautioned in DDR, "not all claims purporting to address Internet-centric challenges are eligible for patent." 773 F.3d at 1258. The '581 Patent is not some "combination of conventional elements [which together] may be unconventional and therefore patentable," Enfish, 56 F. Supp. 3d at 1175 (citing Diehr, 450 U.S. at 188), but is instead a combination of conventional elements that are wholly unlimited in their application. Claims of this nature must "specify how [a] solution" to a computer-centric problem works in order to remove it from the abstract realm. Source Search Techs., 2015 WL 3980628, at *12.

Finally, IV's own characterization of Claim 1 of the '581 Patent states that it "claims a method transmitting a 'discovery rule,' a specific computer process, across a communication link in a computer system to collect information about the computer system." Dkt. No. 14-220, ECF No. 52, at 20. That said, the claim, even as defined by Plaintiffs, describes an abstract idea with insufficient limitations that would amount to less than claiming the abstract idea itself. To explain why, the Court will address with brackets where and how the limitations fail in order to illustrate this conclusion: IV claims a "a method transmitting a discovery rule, a specific computer process [but not just one specific computer process, rather any discovery rule, which is

defined in the Patent as "a series of Boolean operations, mathematical equations, or other comparisons or evaluations of the collected data"; anything matching the definition counts, according to the Patent, and is therefore claimed as part of the method], across a communication link in a computer system [and again, any communication link will do], to collect information about the computer system [there is similarly no limit on the type of information that could be collected]."

This claim is impossibly broad, and illustrates the lack of limitations which could render the otherwise patent ineligible abstract idea viable under § 101, and other claims including the use of a "discovery agent" or a "computer-readable medium" similarly fail to add any inventive step that would make them patent eligible. In short, Claim 1 "states that 'the discovery rule is to be applied to data' so as 'to generate information,' but does not indicate how the rule is applied or how data is generated, and in what form." Dkt. No. 14-220, ECF No. 58, at 17 n.8.

The '581 Patent is drawn to the abstract idea of gathering, storing, and acting on data based on predetermined rules, and its claims⁶⁷ for doing so on generic computers and networks

⁶⁶ The Court also concludes that IV's reliance on *Aristocrat Techs. Austral. Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008) is misplaced. Plaintiffs cite that case for the proposition that "a 'general purpose computer' that executes particular software instructions creates a 'special purpose machine' programmed to carry out the instructions." Dkt. No. 14-220, ECF No. 52, at 21. However, IV omits a key statement contained in the Federal Circuit's § 112 (*not* § 101) analysis, that the "special purpose machine" is created once it is "programmed to carry out a *particular* algorithm." *Aristocrat*, 521 F.3d at 1333 (emphasis added).

Unlike the "particular," "disclosed" algorithms summarized by the Federal Circuit, *id.*, one of the primary *Alice* problems with the '581 Patent is the limitless nature of the term "discovery rules," which according to the Patent covers a broad swath of possibilities, as discovery rules "may be a series of Boolean operations, mathematical equations, or other comparisons or evaluations of the collected data," '581 Patent, at 3:19–22.

Akin to other claims held patent ineligible, the '581 Patent "expressly disavows any requirement for specific programming or architecture." *Mkt. Track, LLC v. Efficient Collaborative Retail Mktg., LLC*, No. 14-4957, 2015 WL 3637740, at *9 (N.D. Ill. June 11, 2015); *see also Thales Visionix, Inc. v. United States*, 122 Fed. Cl. 245, 256 (Fed. Cl. 2015) (MOT test failed because "transforming data from one form to another does not qualify as the kind of transformation regarded as an important indicator of patent eligibility" (internal quotation marks and citation omitted)).

⁶⁷ This Court's review and consideration of various dependent claims of the representative claims of the '581 Patent do not alter the conclusion that they are each not patent eligible under § 101. Apart from the reality that it is the

using mathematical formulas and code sequences do not transform it into patent-eligible subject matter.

G. The '434 Patent

1. Claims and Description of the '434 Patent

The '434 Patent, entitled "System and Method for Retrieving Information from a Database Using an Index of XML Tags and Metafiles," includes the following representative claims:

1. A method for creating a database and an index to search the database, comprising the steps of:

creating the index by defining a plurality of XML tags including domain tags and category tags; creating a first metafile that corresponds to a first domain tag; and

creating the database by providing a plurality of records, each record having an XML index component.

7. A method for searching a database of records using an index including a plurality of tags, comprising the steps of:

receiving a request for information;

identifying a first tag that is associated with the request;

determining whether a first metafile comprising a second tag corresponds to the first tag;

if the first metafile corresponds to the first tag, then determining whether the second tag is relevant to the request;

if the second tag is relevant to the request, then combining the first tag and the second tag to create a key; and

using the key to search the database to locate at least one record that includes the first tag and the second tag.

This Patent is generally drawn to methods for creating a database using tags to identify various records and then for searching that database. Claims 1 through 6, as well as Claim 25, deal with methods for creating a database and index, while all others deal with methods of searching the database using the index. The Court concludes that Claims 1 and 7 are

obligation of the Plaintiff to demonstrate how and why that would be the case, the dependent claims do not narrow or limit the impermissible breadth of the independent claims, nor do they alter their essential scope.

"substantially similar and linked to the same abstract idea" as the other claims in the Patent, and thus will assess them as representative. *Content Extraction*, 776 F.3d at 1348; *Ultramercial*, 772 F.3d at 712. Distinctions in the other independent claims are immaterial, and for the reasons noted above, consideration of the dependent claims does not alter that conclusion.⁶⁸

2. Analysis of the '434 Patent

Claim 1 generally recites a method for creating a database and an index to search that database. It specifically claims the method of (1) creating an index by picking some number of XML tags "including domain tags and category tags;" (2) creating a metafile, or essentially adding additional identifying information onto the tags; and (3) creating a database by compiling some number of records, which can relate back to the index.

Claim 7 generally recites a method for searching a database created with the help of an index and tags. The method claims (1) receiving a request for information; (2) identifying a tag, or some proxy for the information associated with that request; (3) determining whether any other tags are also associated with the request, or whether the request could fall into multiple categories; (4) if multiple tags or other specific information are relevant, combining them; and (5) using the combination to search the database for a record.

Addressing *Alice* Step One on whether the claims are directed to an abstract idea the Court asks, "[W]hat are the claims generally trying to achieve?" *Tranxition*, 2015 WL 4203469, at *6. The Erie and Highmark Defendants argue that they merely claim "the abstract idea of creating an index and using it to search a database," Dkt. No. 14-220, ECF No. 47, at 21, and the Old Republic Defendants similarly assert that they claim the idea of "[s]earching for information stored in a database by searching for a combination of 'tags' that serve as a proxy for the

⁶⁸ For instance, Claim 14 is largely similar to Claim 7 except that it also recites "[a] computer-readable medium having stored thereon computer-executable instructions for" performing a slightly altered version of the method in Claim 7.

information," Dkt. No. 14-1130, ECF No. 31, at 5. IV counters that the '434 Patent is directed to a "specific computer solution [rather than an abstract idea], namely retrieving computer files from a computer database system by utilizing an index file that contains specific metadata linked to those files and transforming that data to create a unique key." Dkt. No. 14-220, ECF No. 52, at 23 (citing '434 Patent, Abstract).

But even when framed as a "computer solution" employed on a "computer database system," the Court concludes that the heart of the patented invention, or the true nature of the claims, are indeed drawn to an abstract idea. *Alice*, 134 S. Ct. at 2355–57; *Ultramercial*, 772 F.3d at 714; *Accenture*, 728 F.3d at 1344. The idea in this instance is that of creating an index and using that index to search for and retrieve data. This type of activity is undoubtedly longstanding and can be easily analogized to a great deal of conduct taking place before computers or the Internet even existed. In that vein, the Old Republic Defendants specifically analogize the claims at issue to the same process by which one searches for a book in a library using 'tags' as proxies for book titles and authors, identifying specifically the Library of Congress's classification system as one very similar "brick and mortar" analogue. Dkt. No. 14-1130, ECF No. 31, at 5–6; 14.⁶⁹

IV says that there are in fact additional features which limit the claims (somewhat), *see* Dkt. No. 14-220, ECF No. 52, at 23 ("[M]ost of the claims contain[] elements limited to XML databases, which are specialized computer database systems." (citing '434 Patent, at Claims 1–6; Claims 19–26)), but the Court should address these purported limitations at Step Two to determine if they supply any inventive concept. Those limitations do not make the underlying

⁶⁹ The Court declines to take judicial notice of any documents attached to further explain the Library of Congress's system, as requested by the Old Republic Defendants. Dkt. No. 14-1130, ECF No. 33. There is no need to review such information when any system of organization that uses tags and searches and implements steps on computer would likely be covered under this Patent.

purpose, or heart of the '434 Patent's claims, any less abstract. *Ultramercial*, 772 F.3d at 714; *Accenture*, 728 F.3d at 1344.

At bottom, these claims are directed to creating an index and using it to search for and retrieve data, which numerous courts have held to be an abstract idea. *See, e.g., Cyberfone*, 558 F. App'x at 992 ("[U]sing categories to organize, store, and transmit information is [an abstract idea]."); *Mkt. Track*, 2015 WL 3637740, at *3 (holding ineligible a patent that read stored data, recognized information within that data, and presented the information in a format which humans could read); *Data Distribution Techs., LLC v. BRER Affiliates, Inc.*, No. 12-4878, 2014 WL 4162765, at *2 (D.N.J. Aug. 19, 2014) (holding a "method of maintaining and distributing database information" "directed to an abstract idea").

The steps of Claim 1 (and Claims 2–6) go to the "creating an index" portion of the idea: XML tags are designated (and "XML tags" are nothing more than "patent-ese" for an information identifier, *see* '434 Patent, at 7:20–22 ("A tag is generally associated with data or text and conveys information about the data or text."), written in a commonly-used programming language, "eXtensible Markup Language," *id.*, Abstract), a "metafile" is created (a metafile "is associated with a tag and provides additional information about the data or text described by the tag," *id.* at 7:22–24), and a database is created and the information sought has its own "XML index component" (an "index is essentially a guide that is used to locate information stored in a database," *id.* at 2:39–41). These steps can be boiled down to (1) identifying categories that will be used to search; (2) adding sub-categories, or further detail to those categories; and (3) placing records or information that can be identified by those categories into a database.

⁷⁰ "[C]ourts must be careful to avoid allowing the typically convoluted claim language—"patent-ese"—to obfuscate the general purpose and real essence of software patent claims." *In Re TLI Comms. LLC Patent Litigation*, __ F. Supp. 3d __, No. 14-2534, 2015 WL 627858, at *6 (E.D. Va. Feb. 6, 2015).

The steps of Claim 7 are directed to using the index to search for and retrieve information, but are similarly abstract in their explanation. When the patent-ese is stripped away, Claim 7 simply recites the method of (1) receiving a request; (2) identifying the request's relevant category; (3) determining if a subcategory applies; (4) if it does, then determining if another category is also relevant; (5) if a second category is relevant, combine both categories to create one search; and (6) using that single search to find one or more records that fit both categories.

This method, of searching a database and retrieving information, claims an abstract idea. *Content Extraction*, 776 F.3d at 1347 ("The concept of data collection, recognition, and storage is undisputedly well-known. Indeed, humans have always performed these functions."); *Tranxition*, 2015 WL 4203469, at *9 (citing *Cyberfone Sys.*, 558 F. App'x at 992 ("the well-known concept of categorical data storage, *i.e.*, the idea of collecting information in classified form, then separating and transmitting that information according to its classification, is an abstract idea that is not patent-eligible."); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011) (holding that the claimed process to "manipulate[] data to organize it in a logical way" was not sufficiently transformative to state a patent eligible invention)). When nothing in the claims removes the underlying purpose of the Patent from the abstract realm, the Court concludes that the answer at *Alice* Step One is "yes."

Turning to *Alice* Step Two, the Court again "considers the elements of each claim both individually and as an ordered combination" to determine whether they present an "inventive concept" that transforms the claim's abstract nature into something "significantly more than a patent upon the ineligible concept itself." *Alice*, 134 S. Ct. at 2355 (citing *Mayo*, 132 S. Ct. 1289 (internal quotation marks omitted). Incorporation of typical computer components won't cut it,

as the Supreme Court has counseled that the second step requires more than merely stating the abstract idea and applying it on a general computer. *Id.* at 2357. As instructed by the Supreme Court and Federal Circuit, the Court is at this stage especially wary of broad claims that would preempt too much use of the abstract idea.

The Erie and Highmark Defendants argue that the '434 Patent fails this test because the abstract idea's implementation on a generic computer using XML tags is not inventive, nor does it purport to improve the underlying technology, but rather uses "a combination of well-known and conventional components already present in 'most conventional computer systems.'" ECF No. 47, at 23 & n.10 (quoting '434 Patent, at 5:61–64). The Old Republic Defendants add that the claims are incredibly broad, and the Patent's "preference for implementation on a conventional computer" along with limitations including a "computer-readable medium" do nothing to render it significantly more than a patent on the abstract idea itself. Dkt. No. 14-1130, ECF No. 31, at 14–15.

IV counters that Defendants ignore concrete claim limitations which satisfy the machine-or-transformation test, and attempts to distinguish its '434 Patent from that at issue in cases like *Accenture*, arguing that this invention "is a new database architecture that employs inventive computer software and data structures." Dkt. No. 14-220, ECF No. 52, at 24. IV also argues that the XML-based database system adds a meaningful limitation in that it shows "the claims do not preempt all uses or organizing information in a database." *Id.* at 25.

The claims of the '434 Patent, considered both individually and as an ordered combination, fail to provide an additional feature that would transform the abstract idea of creating an index and using that index to search for and retrieve data into patent eligible subject matter. Indeed, the Court concludes from reviewing the claims that the Patent includes little

more than the abstract idea itself, and to the extent there are additional limitations, they are "little more than synonyms for generic conventional computer processing steps," *Tranxition*, 2015 WL 4203469, at *12, which are insufficient to convey an inventive concept under *Alice* and *Mayo*. A database is a typical data-storage component of a generic computer, and the ability of a computer to index and search a database according to identifiers such as XML tags is simply not inventive, *cf. Ultramercial*, 772 F.3d at 717 (explaining that "the transfer of content between computers is merely what computers do" and does not render claims patent eligible).

That the database uses XML as opposed to a different programming language is insufficient to limit the Patent's reach, as that only narrows down the possibility of preemption to methods of creating and searching a computer database using one entire language—and the '434 Patent in fact seeks to claim more, as the "XML" limitation is not included in every claim, *see* '434 Patent, at Claims 7–18; 27–28, and the Patent explains that "[a]lthough the present invention has been described in connection with the XML language, those skilled in the art will realize that the invention can also be practiced using other languages that use tags and support the association of a file, such as a metafile with a tag," *id.* at 15:19–23, to wit, pretty much any language, and largely any/every computer.

Of course, there is an argument that the '434 Patent claims computer-specific solutions to problems of slow and inefficient searches of databases, in that it seeks to "eliminate the need to conduct multiple searches" or "maintain multiple databases" by implementing a "universal search vocabulary" that efficiently retrieves search results for users without returning too much irrelevant information. *See* '434 Patent, at 2:11–12; 22–23. But unlike the claims at issue in *DDR*, upon which IV relies, efficiently searching for information is not a solution that "is

necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." *DDR Holdings*, 773 F.3d at 1257.

The need and desire to efficiently search for records and obtain only the most relevant ones are not made any less abstract when claims that purport to do so are implemented on a computer database. There are manual processes that could achieve the same result—the fact that they would be slower and less accurate does not change the analysis. OIP Techs., Inc. v. Amazon.com, Inc., 788 F.3d 1359, at *3 (Fed. Cir. 2015) ("[R]elying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible."); Capital One, 2015 WL 4068798, at *3 ("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."); MySpace, Inc. v. GraphOn Corp., 672 F.3d 1250, 1267 (Fed. Cir. 2012) ("While running a particular process on a computer undeniably improves efficiency and accuracy, cloaking an otherwise abstract idea in the guise of a computerimplemented claim is insufficient to bring it within section 101.") (Mayer, J., dissenting from the majority's disposition of the case on obviousness and anticipation grounds instead of under § 101) (collecting cases). The "brick and mortar" analog of searching for a library book using an index and various categories shows the idea's abstract nature, Source Search Techs., LLC v. Kayak Software Corp., __ F. Supp. 3d __, No. 11-3388, 2015 WL 3980628, at *7 (D.N.J. July 1, 2015), and specifying generic computer components and processes like "tags," "metafiles," and a "database" do very little to narrow the concept. See Capital One, 2015 WL 4068798, at *6 ("Requiring the use of a 'software' 'brain' 'tasked with tailoring information and providing it to the user' provides no additional limitation beyond applying an abstract idea, restricted to the Internet, on a generic computer.").

That the Patent claims a method in reaction to the huge amount of information stored and searched in today's world similarly does not make the claims patent eligible. See MicroStrategy Inc., 2015 WL 4425828, at *4 ("The amount of data does not transform the abstract idea. It has been noted that 'data storage is perhaps the textbook example of a conventional computer function." (internal citation omitted)). This conclusion is especially true when "an exemplary computer system for implementing the present invention includes a conventional computer," '434 Patent, at 5:5–6 (emphasis added), and does not even require the use of certain limitations, such as XML and metafiles. See e.g., '434 Patent, at Claims 7–18; 27–28 (claims not including XML limitation); id. at 9:22–24 ("Although each XML tag can have an associated metafile, in some implementations there may be XML tags that do not have associated metafiles."). Even assuming these limitations existed in each and every claim, they are no more than "conventional computer components" and are insufficient to confer patent eligibility. Additionally, steps such as receiving a request for information and identifying a tag, then using a key to search the database are "routine, conventional processing steps that any generic computer can perform, and are not, therefore, an inventive concept." Tranxition, 2015 WL 4203469, at *16 (holding patent ineligible a method for transferring customized user settings from and old computer to a new one).

The claims in the '434 Patent are stated at such a high level of generality that the Court has difficulty contemplating any methods of creating an index and using that index to search for and retrieve data on a computer database that would not be preempted by them. It certainly seeks to preempt use of XML tags to create and then search a database on a generic computer, but then also is not limited to using XML tags. Claim 7, which is representative of the searching portion of the Patent, identifies steps that do no more than identify a request for information,

narrow the request down to a category (and subcategory if necessary) and then search to locate results. The potential preemptive effect of such claims is extreme, and limitations are lacking which could avoid "preempt[ing] use of this approach in all fields" in order to confer patent eligibility. *Alice*, 134 S. Ct. at 2354.⁷¹

The Court concludes that the '434 Patent is directed to an abstract idea and that it does not contain a sufficient inventive concept to remove it from the abstract realm and render it patent eligible under § 101. Defendants' Motions to Dismiss on those grounds will therefore be granted.⁷²

H. The '002 Patent

1. Claims and Description of the '002 Patent

The '002 Patent, entitled "System and Method for Implementing an Intelligent and Mobile Menu-Interface Agent" includes the following representative claim:

1. A method for retrieving user specific resources and information stored either on a local device or a network server, the method comprising the steps of: retrieving a mobile interface from the network server to the local device; displaying the mobile interface on the local device, the mobile interface including a plurality of pointers corresponding to the user specific resources and information; and retrieving the user specific resources and information using the plurality of pointers displayed on the mobile interface.

The '002 Patent claims an invention for "dynamically access[ing] programs, applications, bookmarked URLs, IP addresses, telephone numbers, television channels, radio stations, user profiles, and the like that are specific to a user via any computer type device." '002 Patent,

⁷¹ And the Court's consideration of the dependent claims demonstrates that they do not save the day, as they do not diminish the abstract nature of what is claimed, nor do they generate the requisite inventive concept to make the Patent "patent eligible" under § 101.

⁷² Because the Court concludes that both the '581 Patent and the '434 Patent are not directed to patent eligible subject matter, the Court does not address the portions of the Erie and Highmark Defendants' Motions arguing that IV's infringement claims should be dismissed for failure to set forth sufficient facts to state a claim, or alternatively that this Court should compel IV to provide a more definite statement. Dkt. No. 14-220, ECF No. 47, at 26–32.

Abstract. The method claimed is that for accessing a mobile interface that incorporates pointers tied to user specific information that can be retrieved using pointers contained in the interface. Id. at Claim 1. Dependent Claims 2-5 explain what types of user-specific information can be accessed and is drafted broadly, ranging from "programs, applications, files, documents, bookmarked URLs, and user profiles" to "television channels" to "telephone numbers" to "television program listings." Claim 6 contains an added "step of licensing the user specific resources based on a per user licensing model." Dependent Claims 7–10 contemplate the way in which the mobile interface agent is accessed—through the Internet, a LAN, MAN, or WAN, a cellular network, or a television network (e.g., pretty much anything). These generic dependent claims are then repeated at various times throughout the Patent. See, e.g., Claims 26–33; 35–39; 41-46. The remaining independent claims are "substantially similar and linked" to the same underlying idea as that of the representative claim. Content Extraction, 776 F.3d at 1348; Ultramercial, 772 F.3d at 712. For instance, Claim 11 only varies from Claim 1 in that it claims "retrieving user profile and configuration data from the network server to the local device, wherein the . . . data is used to update the data associated with the mobile interface" in addition to the rest of Claim 1. This addition does not meaningfully distinguish Claim 11 from Claim 1. Remaining independent claims, including the system claims, are similarly all directed to the same underlying idea and thus may be assessed using the representative claim noted above.

2. Analysis of the '002 Patent

Claim 1 recites a method for accessing user specific information that is stored either on a device or on a network server. The claimed method is comprised of (1) retrieving a mobile interface (stored on a network server); (2) displaying the mobile interface, which includes

pointers to the user specific information, on some local device; and (3) retrieving, or accessing, user specific information using pointers on the interface.

The Court concludes that the '002 Patent as a whole claims the abstract idea of remotely accessing user specific information. At bottom, courts are to get to the heart of the patent, *Alice*, 134 S. Ct. at 2355–57; *Ultramercial*, 772 F.3d at 714; *Accenture*, 728 F.3d at 1344, and not be held up by inclusion of only theoretically limiting components of the claims. Just as the Supreme Court disregarded, for the sake of the *Alice* Step One analysis, asserted limitations such as correlation of a shadow credit record and shadow debt record to hold claims together were directed to the abstract idea of "intermediated settlement," the Court disregards at this step the use of limitations such as a "mobile interface," which do not alter the abstract nature of the Patent's claims for remotely accessing user specific information. *Alice*, 134 S. Ct. at 2352 n.2, 2356; *see also Ultramercial*, 772 F.3d at 715 (concluding that "the concept embodied by the majority of the limitations describes only the abstract idea of showing an advertisement before delivering free content" although the claims included other limitations).

The Court will assess the use of the "mobile interface" and other limitations claimed in the Patent on *Alice* Step Two, but at *Alice* Step One the '002 Patent is directed to an abstraction. That it is not directed to a mathematical equation or commercial practice does not make the concept of remote access to a user's stored information any more concrete. *See Accenture*, 728 F.3d at 1344–45 (holding patent ineligible claims directed to the idea of "generating tasks [based on] rules . . . to be completed upon the occurrence of an event."); *Content Extraction*, 776 F.3d at 1347 (holding patent ineligible claims directed to "data collection, recognition, and storage").

At the most basic level, the Court concludes that the claims at issue can be loosely analogized to calling a person from one location in order to obtain information located in another

place; this type of interaction amounts to a general "method of organizing human activity." *Alice*, 134 S. Ct. at 2356; *Capital One*, 792 F.3d at 1367. While that analogy is a simplification given that the '002 Patent contains limitations taking it out of that very traditional "brick and mortar" realm, the analysis in determining whether the included limitations sufficiently convert the abstract idea into patent eligible subject matter is best handled at *Alice* Step Two.

Another district court came to this conclusion in addressing the '002 Patent. See Intellectual Ventures I LLC v. Capital One Financial Corp., No. 14-111, 2015 WL 5165442 (D. Md. Sept. 2, 2015) (rejecting the Report and Recommendation of a Special Master and concluding the '002 Patent claimed ineligible subject matter). That court held the '002 Patent was "directed to the abstract idea of retrieving data located in another place by using a device with information that pinpoints the data's location to facilitate its retrieval." Id. at *20. This Court agrees that recitation of a mobile interface does not change this analysis, and that indeed, Alice Step One is not the proper place to consider it. Id. The proper inquiry is not to hone in on various limitations and perhaps hold the underlying concept less abstract because those limitations are integral aspects or because features in the claim language. The test at Alice Step One is to determine whether the idea at the core of a patent is abstract vel non, since at Alice Step One, the Court is to consider the claims "on their face." Id. Remotely accessing user-specific information is just such an idea. Cf. Internet Patents Corp. v. Active Network, Inc., 790 F.3d 1343, 1348 (Fed. Cir. 2015) ("We agree with the district court that the character of the claimed invention is an abstract idea: the idea of retaining information in the navigation of online forms."). Thus, the Court will move on to *Alice* Step Two.

Alice Step Two requires courts to assess whether each claim's elements, considered "both individually and as an ordered combination," present an "inventive concept" that shows the

claims are "significantly more than a patent upon the ineligible concept itself." *Alice*, 134 S. Ct. at 2355 (citing *Mayo*, 132 S. Ct. at 1294) (internal quotation marks omitted). The possibility that the patent will "tie up too much future use" of the abstract idea is an important concern addressed at Step Two. *Mayo*, 132 S. Ct. at 1302.

In reviewing the claims of the '002 Patent, the Court concludes that they lack the requisite inventive concept that would transform the abstract idea of remotely accessing userspecific information into patent eligible subject matter. Most specifically, use of a "mobile interface" does not change the conclusion that the idea underlying the Patent as a whole is abstract and does not provide an inventive concept. As other courts have recognized, "concrete and tangible elements such as computers, portable devices, and a mobile interface" do not render the claims any less abstract. Affinity Labs of Texas, LLC v. Amazon. Com, Inc., No. 15-0029, 2015 WL 3757497, at *7—*8 (W.D. Tex. June 12, 2015) (Report & Recommendation) (emphasis added) (holding claims directed to "delivering selectable media content and subsequently playing the selected content on a portable device" patent ineligible). Indeed, in another recently-decided case (involving IV as the plaintiff), the Federal Circuit rejected the argument that an "interactive interface' is a specific application of an abstract idea that provides an inventive concept," explaining that where IV did not "assert that it invented an interactive interface that manages web site content" and otherwise described it in "vague and generic" terms, the interface was nothing more than a "generic web server with attendant software, tasked with providing web pages to and communicating with the user's computer." Intellectual Ventures I LLC v. Capital One Bank (USA), 792 F.3d 1363, 1370 (Fed. Cir. 2015). Similarly, IV does not claim that it invented a specific mobile interface, and instead only claims "a system and method for using" one. Id. (where IV did not claim to have invented an interactive interface, use

of that interface could not convert the claims which were otherwise directed to an abstract idea to patent eligible subject matter).

Apart from the mobile interface, which on its own is not inventive, the Court concludes that limitations such as a "local device," a "network server," and "pointers" are similarly conventional and well-known computer technology. *See* '002 Patent, at 1:36–41 (defining a "pointer" as a "reference to a type of menu item that can be accessible on the computer, [portable digital assistant], or a server" and stating that "pointers are commonly used to retrieve/access menu items."). That the mobile interface can be retrieved and used "via the Internet," "via a cellular network," "via a television network," or by commonly used networks does not change the analysis. *Id.* at Claims 7, 9, 10. "[E]xporting user profile and configuration data from a first network to a second network" also fails to provide an inventive concept. *See buySAFE*, 765 F.3d at 1355 (explaining that "sending" and "receiving" data over a network is "not even arguably inventive"). While IV generally maintains that "[m]any dependent claims further limit both the type of data that the mobile interface agent can access and the type of computer systems upon which the mobile interface operates," Dkt. No. 14-220, ECF No. 52, at 27, the Court divines no such limitations from the language of the claims themselves.

Considering the issue of preemption, the '002 Patent explicitly states that it governs "dynamic access" to a broad swath of information "via *any* computer *type* device." '002 Patent, Abstract (emphasis added). As the Old Republic Defendants point out, the '002 Patent states that there are "countless uses of the present invention," and the Patent specifically enumerates broad categories of covered usage from "conduct[ing] online financial transactions more efficiently" to "us[ing] the user profile on the network for online advertising or promotional services." *Id.* at 8:7–13; Dkt. No. 14-1130, ECF No. 31, at 16. The claims do not lend

themselves, either individually or as an ordered combination, to concluding that the invention would not preclude any attempt to design another invention for remote access to user-specific information using any one of an infinite number of devices. They point in the opposite direction.

A desire to remotely access user-specific information also is not a problem arising only in the computer context. As noted above, the abstract idea underlying the '002 Patent existed long before computer technology existed and has analogues in the brick and mortar context—it therefore does not contain the type of claims held patent eligible in *DDR Holdings*, 773 F.3d at 1257. Even if it did address a problem "rooted in computer technology," *id.*, its claims would need to specify "how that solution works," *Source Search Techs.*, 2015 WL 3980628, at *12. Claiming systems and methods that involve nothing more than (1) "retrieving a mobile interface from a network server to the local device"; (2) displaying the interface on the device and including pointers which correspond to user preferences; and (3) retrieving that user-specific information "using a plurality of pointers," which are themselves commonly used, threatens to preempt too much and simply does not provide the type of inventive concept necessary to render the claims patent eligible under § 101.

The Court concludes that the claims of the '002 Patent are directed to patent ineligible subject matter. The Old Republic Defendants' Motion to Dismiss claims relating to that Patent will therefore be granted.⁷³

⁷³ This means that IV's claims relying on the '002 Patent as to the Erie and Highmark Defendants would similarly fail. See Thermo-Ply, Inc. v. Ohio Willow Wood Co., No. 05-779, 2014 WL 285066, at *2 (M.D. Fla. Jan. 24, 2014) ("A judgment of invalidity in one patent action renders the patent invalid in any later actions based on the same patent."); see also DietGoal Innovations LLC v. Chipotle Mexican Grill, 70 F. Supp. 3d 808, 811, 816 (E.D. Tex. 2014) (holding that a prior decision finding patent claims to be invalid as unpatentable subject matter afforded collateral estoppel affect to suit involving the same patent).

IV. **CONCLUSION**

For the foregoing reasons, and upon review of the Patents at issue, the parties' briefs, and

the arguments raised in open Court, the Court grants the Motion to Dismiss the claims as to the

'581 Patent without prejudice for lack of subject matter jurisdiction, and also grants the Erie and

Highmark Defendants' Motion to Dismiss based on patent ineligibility as to the '434 Patent with

prejudice. Moreover, if the Court concluded that it had jurisdiction as to the '581 Patent, it

would also grant the Motions to Dismiss on patent ineligibility grounds with prejudice. Finally,

the Court grants the Old Republic Defendants' Motion to Dismiss as to the '434 Patent and the

'002 Patent with prejudice. Because the Court concludes the '002 Patent is not directed to patent

eligible subject matter, claims based on infringement of it against the Erie and Highmark

Defendants must also dismissed with prejudice.

An appropriate Order will issue.

United States District Judge

Dated: September 25, 2015

cc: All counsel of record

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