


ROBINSON, District Judge

I. INTRODUCTION

On March 25, 2015, plaintiff Improved Search LLC (“plaintiff”) filed a complaint alleging infringement of U.S. Patent No. 6,604,101 (“the ‘101 patent”) and 7,516,154 (“the ‘154 patent”) against defendant AOL Inc. (“defendant”). (D.I. 1) Presently before the court is defendant’s motion to dismiss. (D.I. 9) The court has jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

II. BACKGROUND

Plaintiff is a limited liability company organized under the laws of the State of Florida with its principal place of business in Fort Lauderdale, Florida. (D.I. 1 at ¶ 4) Defendant is a corporation organized under the laws of the State of Delaware with its headquarters in New York, New York. (D.I. 1 at ¶ 6) The ‘101 patent, titled “Method and System for Translingual Translation of Query and Search and Retrieval of Multilingual Information on a Computer Network,” was filed on June 28, 2000 and issued August 5, 2003. The ‘154 patent, titled “Cross Language Advertising,” was filed on February 8, 2006 and issued on April 7, 2009. Plaintiff accuses the “AOL Search” service of infringing claims 1, 2, 4, 5, 24, 25, and 27 of the ‘101 patent and claim 1 of the ‘154 patent. (D.I. 1 at ¶¶ 27, 37)

III. STANDARD OF REVIEW

A motion filed under Federal Rule of Civil Procedure 12(b)(6) tests the sufficiency of a complaint’s factual allegations. *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007); *Kost v. Kozakiewicz*, 1 F.3d 176, 183 (3d Cir. 1993). A complaint must contain “a short and plain statement of the claim showing that the pleader is entitled to relief, in

order to give the defendant fair notice of what the . . . claim is and the grounds upon which it rests.” *Twombly*, 550 U.S. at 545 (internal quotation marks omitted) (interpreting Fed. R. Civ. P. 8(a)). Consistent with the Supreme Court’s rulings in *Twombly* and *Ashcroft v. Iqbal*, 556 U.S. 662 (2009), the Third Circuit requires a two-part analysis when reviewing a Rule 12(b)(6) motion. *Edwards v. A.H. Cornell & Son, Inc.*, 610 F.3d 217, 219 (3d Cir. 2010); *Fowler v. UPMC Shadyside*, 578 F.3d 203, 210 (3d Cir. 2009). First, a court should separate the factual and legal elements of a claim, accepting the facts and disregarding the legal conclusions. *Fowler*, 578 F.3d. at 210-11. Second, a court should determine whether the remaining well-pled facts sufficiently show that the plaintiff “has a ‘plausible claim for relief.’” *Id.* at 211 (quoting *Iqbal*, 556 U.S. at 679). As part of the analysis, a court must accept all well-pleaded factual allegations in the complaint as true, and view them in the light most favorable to the plaintiff. See *Erickson v. Pardus*, 551 U.S. 89, 94 (2007); *Christopher v. Harbury*, 536 U.S. 403, 406 (2002); *Phillips v. Cnty. of Allegheny*, 515 F.3d 224, 231 (3d Cir. 2008). In this regard, a court may consider the pleadings, public record, orders, exhibits attached to the complaint, and documents incorporated into the complaint by reference. *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 551 U.S. 308, 322 (2007); *Oshiver v. Levin, Fishbein, Sedran & Berman*, 38 F.3d 1380, 1384-85 n.2 (3d Cir. 1994).

The court’s determination is not whether the non-moving party “will ultimately prevail” but whether that party is “entitled to offer evidence to support the claims.” *United States ex rel. Wilkins v. United Health Grp., Inc.*, 659 F.3d 295, 302 (3d Cir. 2011). This “does not impose a probability requirement at the pleading stage,” but instead “simply calls for enough facts to raise a reasonable expectation that discovery

will reveal evidence of [the necessary element].” *Phillips*, 515 F.3d at 234 (quoting *Twombly*, 550 U.S. at 556). The court’s analysis is a context-specific task requiring the court “to draw on its judicial experience and common sense.” *Iqbal*, 556 U.S. at 663-64.

IV. DISCUSSION

A. 35 U.S.C. § 101

Section 101 provides that patentable subject matter extends to four broad categories, including: “new and useful process[es], machine[s], manufacture, or composition[s] of matter.” 35 U.S.C. § 101; *see also Bilski v. Kappos*, 561 U.S. 593, 601 (2010) (“*Bilski II*”); *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980). A “process” is statutorily defined as a “process, art or method, and includes a new use of a known process, machine manufacture, composition of matter, or material.” 35 U.S.C. § 100(b).

The Supreme Court has explained:

A process is a mode of treatment of certain materials to produce a given result. It is an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing. If new and useful, it is just as patentable as is a piece of machinery. In the language of the patent law, it is an art. The machinery pointed out as suitable to perform the process may or may not be new or patentable; whilst the process itself may be altogether new, and produce an entirely new result. The process requires that certain things should be done with certain substances, and in a certain order; but the tools to be used in doing this may be of secondary consequence.

Diamond v. Diehr, 450 U.S. 175, 182-83 (1981) (internal quotations omitted).

The Supreme Court recognizes three “fundamental principle” exceptions to the Patent Act’s subject matter eligibility requirements: “laws of nature, physical phenomena, and abstract ideas.” *Bilski II*, 561 U.S. at 601. In this regard, the Court has held that “[t]he concepts covered by these exceptions are ‘part of the storehouse of knowledge of all men ... free to all men and reserved exclusively to none.’” *Bilski II*, 561

U.S. at 602 (quoting *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)). “[T]he concern that drives this exclusionary principle is one of pre-emption,” that is, “that patent law not inhibit further discovery by improperly tying up the future use of these building blocks of human ingenuity.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, — U.S. —, 134 S.Ct. 2347, 2354 (2014) (citing *Bilski II*, 561 U.S. at 611-12 and *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. —, 132 S.Ct. 1289, 1301 (2012)).

Although a fundamental principle cannot be patented, the Supreme Court has held that “an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection,” so long as that application would not preempt substantially all uses of the fundamental principle. *Bilski II*, 561 U.S. at 611 (quoting *Diehr*, 450 U.S. at 187) (internal quotations omitted); *In re Bilski*, 545 F.3d 943, 954 (Fed. Cir. 2008) (“*Bilski I*”). The Court has described the

framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts. If so, we then ask, “[w]hat else is there in the claims before us?” To answer that question, we consider the elements of each claim both individually and “as an ordered combination” to determine whether the additional elements “transform the nature of the claim” into a patent-eligible application. We have described step two of this analysis as a search for an “inventive concept”—i.e., an element or combination of elements that is “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.”

Alice, 134 S.Ct. at 2355 (citing *Mayo*, 132 S.Ct. at 1294, 1296-98).¹

¹ The machine-or-transformation test still may provide a “useful clue” in the second step of the *Alice* framework. *Ultramerical, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014) (citing *Bilski II*, 561 U.S. at 604 and *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can.*, 687 F.3d 1266, 1278 (Fed. Cir. 2012)). A claimed process can be patent-

“[T]o transform an unpatentable law of nature into a patent-eligible application of such a law, one must do more than simply state the law of nature while adding the words ‘apply it.’” *Mayo*, 132 S.Ct. at 1294 (citing *Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972)) (emphasis omitted). It is insufficient to add steps which “consist of well-understood, routine, conventional activity,” if such steps, “when viewed as a whole, add nothing significant beyond the sum of their parts taken separately.” *Mayo*, 132 S. Ct. at 1298. “Purely ‘conventional or obvious’ [pre]-solution activity’ is normally not sufficient to transform an unpatentable law of nature into a patent-eligible application of such a law.” *Id.* (citations omitted). Also, the “prohibition against patenting abstract ideas ‘cannot be circumvented by attempting to limit the use of the formula to a particular technological environment’ or adding ‘insignificant post-solution activity.’” *Bilski II*, 561 U.S. at 610-11 (citation omitted). For instance, the “mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Alice*, 134 S.Ct. at 2358. “Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of ‘additional featur[e]’ that provides any ‘practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.’” *Id.* (citations omitted).

Because computer software comprises a set of instructions,² the first step of *Alice* is, for the most part, a given; i.e., computer-implemented patents generally involve

eligible under § 101 if: “(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.” *Bilski I*, 545 F.3d at 954, *aff’d on other grounds*, *Bilski II*, 561 U.S. 593.

² Or, to put it another way, software generally comprises a method “of organizing human activity.” *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367-68 (Fed. Cir. 2015) (citing *Alice*, 134 S.Ct. 2351-52, and *Bilski II*, 561 U.S. at 599).

abstract ideas. The more difficult part of the analysis is subsumed in the second step of the *Alice* analysis, that is, determining whether the claims “merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet,” or whether the claims are directed to “a problem specifically arising in the realm of computer technology” and the claimed solution specifies how computer technology should be manipulated to overcome the problem. *DDR Holdings, LLC v. Hotels.Com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014).

In *DDR*, for example, the claims at issue involved computer technology directed at retaining website visitors.³ In its analysis, the Federal Circuit rejected the notion that the pre-Internet analog to the claims at issue ended the inquiry, explaining that while

³ In *DDR*, representative claim 19 of U.S. Patent No. 7,818,399 recites:

A system useful in an outsource provider serving web pages offering commercial opportunities, the system comprising:

(a) a computer store containing data, for each of a plurality of first web pages, defining a plurality of visually perceptible elements, which visually perceptible elements correspond to the plurality of first web pages;

(i) wherein each of the first web pages belongs to one of a plurality of web page owners;

(ii) wherein each of the first web pages displays at least one active link associated with a commerce object associated with a buying opportunity of a selected one of a plurality of merchants; and

(iii) wherein the selected merchant, the out-source provider, and the owner of the first web page displaying the associated link are each third parties with respect to one other;

(b) a computer server at the outsource provider, which **computer server** is coupled to the computer store and **programmed to**:

(i) receive from the web browser of a computer user a signal indicating activation of one of the links displayed by one of the first web pages;

(ii) automatically identify as the source page the one of the first web pages on which the link has been activated;

(iii) in response to identification of the source page, automatically retrieve the stored data corresponding to the source page; and

the “store within a store” concept . . . may have been well-known by the relevant time frame, that practice did not have to account for the ephemeral nature of an Internet “location” or the near-instantaneous transport between these locations made possible by standard Internet communication protocols, which introduces a problem that does not arise in the “brick and mortar” context.

773 F.3d at 1258. In other words, “[a]lthough the claims address[ed] a business challenge . . . , it [was] a challenge particular to the Internet.” *Id.* at 1257. The Court concluded that, under any of the characterizations of the abstract idea, the claims satisfied step two of *Alice* as being

different enough in substance from those in *Ultramercial* because they do not broadly and generically claim “use of the Internet” to perform an abstract business practice (with insignificant added activity). Unlike the claims in *Ultramercial*, 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. . . .

In sum, the 399 patent’s claims are unlike the claims in *Alice*, *Ultramercial*, *buySAFE*, *Accenture*, and *Bancorp* that were found to be “directed to” little more than an abstract concept. To be sure, the ‘399 patent’s claims do not recite an invention as technologically complex as an improved, particularized method of digital data compression. But nor do they recite a commonplace business method aimed at processing business information, applying a known business process to the particular technological environment of the Internet, or creating or altering contractual relations using generic computer functions and conventional network operation, such as the claims in *Alice*, *Ultramercial*, *buySAFE*, *Accenture*, and *Bancorp*.

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- (iv) using the data retrieved, automatically generate and transmit to the web browser a second web page that displays:
 - (A) information associated with the commerce object associated with the link that has been activated, and
 - (B) the plurality of visually perceptible elements visually corresponding to the source page.

773 F.3d at 1249-50 (emphasis added).

Id. at 1258-59 (citing *Alice*, 134 S.Ct. at 2359; *Ultramercial*, 772 F.3d 709, 714-16 (Fed. Cir. 2014); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014); *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344-45 (Fed. Cir. 2013); *Bancorp*, 687 F.3d at 1277-78); *but see Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1331-35 (Fed. Cir. 2012).

In *DDR*, the analytical framework (in the context of computer-implemented inventions) was articulated so as to require that the inventive concept “recite a specific way” to solve a “particular Internet-centric problem,” with the claimed solution being “necessarily rooted in computer technology,” so that the result “is not merely the routine or conventional use of the Internet.” 773 F.3d at 1257, 1259. Since providing that explanation, the Federal Circuit has not preserved the validity of any other computer-implemented invention under § 101.⁴ For instance, in *Intellectual Ventures*, a case that also presented claims directed at websites,⁵ the Court explained that, “[a]t step one of

⁴ See, e.g., *In re Smith*, Civ. No. 2015-1664, 2016 WL 909410 (Fed. Cir. Mar. 10, 2016); *Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314 (Fed. Cir. 2016); *Vehicle Intelligence and Safety LLC v. Mercedes-Benz USA, LLC*, Civ. No. 2015-1411, 2015 WL 9461707 (Fed. Cir. Dec. 28, 2015); *Versata Dev. Grp., Inc. v. SAP America, Inc.*, 793 F.3d 1306 (Fed. Cir. 2015); *Intellectual Ventures*, 792 F.3d 1363; *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343 (Fed. Cir. 2015); *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359 (Fed. Cir. 2015); *Allvoice Devs. US, LLC v. Microsoft Corp.*, 612 Fed. Appx. 1009 (Fed. Cir. 2015); *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343 (Fed. Cir. 2014).

⁵ Representative claim 1 of U.S. Patent No. 7,603,382 recites:

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.

the *Alice* framework, it is often useful to determine the breadth of the claims in order to determine whether the claims extend to cover a “fundamental . . . practice long prevalent in our system.” *Intellectual Ventures*, 792 F.3d at 1369 (citing *Alice*, 134 S. Ct. at 2356). The Court characterized the claims at issue as relating to “customizing information based on (1) information known about the user and (2) navigation data.” *Id.* Likening “[t]his sort of information tailoring” to “providing different newspaper inserts based upon the location of the individual,” *id.*, the Court concluded that the first aspect of the inventive concept was an abstract idea. The second aspect of the inventive concept, using “navigation data (i.e., information relating to when the user navigated to the website) to ‘customize’ the website,” *id.*, the Court again concluded that “[t]ailoring information based[, e.g.,] on the time of day of viewing is also an abstract, overly broad concept long-practiced in our society.” *Id.* at 1370.⁶

Turning to the second step of *Alice*, the *Intellectual Ventures* Court concluded that the claims at issue presented no inventive concept “that would support patent eligibility.”⁷ *Id.* at 1370. The Federal Circuit explained:

Intellectual Ventures, 792 F.3d at 1368.

⁶ In this regard, the observation made by the district court in *Paone v. Broadcom Corp.*, Civ. No. 15-0596, 2015 WL 4988279 (E.D.N.Y. Aug. 19, 2015), is worth noting, that (in the context of encryption technology) it was of

no moment that “[e]ncryption, in general, represents a basic building block of human ingenuity that has been used for hundreds, if not thousands, of years.” That is because [U.S. Patent No. 6,259,789] does not claim a process that can or does involve the encryption of data for some purpose that is otherwise abstract. Rather, it claims a specific method of doing so.

Id. at *7 (citation omitted) (emphasis omitted).

⁷ Despite the “dynamic presentation of data – that is, . . . the claimed invention in ‘real time’ customizes the web page based on the information it knows about the particular

Steps that do nothing more than spell out what it means to “apply it on a computer” cannot confer patentability. . . . 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.

Id. at 1370-71. In distinguishing *DDR*, the *Intellectual Ventures* Court offered the following analysis:

The patent at issue in [*DDR*] dealt with a problem unique to the Internet: Internet users visiting one web site might be interested in viewing products sold on a different web site, but the owners of the first web site did not want to constantly redirect users away from their web site to a different web site. . . . The claimed solution used a series of steps that created a hybrid web page incorporating “look and feel” elements from the host web site with commerce objects from the third-party web site. . . . The 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 sequences of events after the click of a hyperlink advertisement. . . . The patent claims [in *Intellectual Ventures*] do not address problems unique to the Internet, so *DDR* has no applicability.^[8]

Id. at 1371 (citations omitted).

In reviewing post-*Alice* cases such as *DDR* and *Intellectual Ventures*, the court is struck by the evolution of the § 101 jurisprudence, from the complete rejection of patentability for computer programs⁹ to the almost complete acceptance of such,¹⁰ to

viewer” – and despite the claimed “interactive interface,” which was “broadly construed by the district court to mean ‘a selectively tailored medium by which a web site user communicates with a web site information provider.’” *Intellectual Ventures*, 792 F.3d at 1369-70.

⁸ But recall the “store within a store” pre-Internet analog rejected in *DDR*.

⁹ See, e.g., 33 Fed. Reg. 15581, 15609-10 (1968), and Justice Steven’s dissent in *Diehr*, whose solution was to declare all computer-based programming unpatentable, 450 U.S. at 219.

¹⁰ *State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998), *abrogated by Bilski I*, in which “a computer-implemented invention was considered patent-eligible so long as it produced a ‘useful, concrete and tangible result.’” *DDR*, 773 F.3d at 1255 (citing *State Street Bank*, 149 F.3d at 1373).

the current (apparent) requirements that the patent claims in suit (1) disclose a problem “necessarily rooted in computer technology,” and (2) claim a solution that (a) not only departs from the “routine and conventional” use of the technology, but (b) is sufficiently specific so as to negate the risk of pre-emption. See *DDR*, 773 F.3d at 1257; *Intellectual Ventures*, 792 F.3d at 1371. In other words, even though most of the patent claims now being challenged under § 101 would have survived such challenges if mounted at the time of issuance, these claims are now in jeopardy under the heightened specificity required by the Federal Circuit post-*Alice*. Moreover, it is less than clear how a § 101 inquiry that is focused through the lens of specificity can be harmonized with the roles given to other aspects of the patent law (such as enablement under § 112 and non-obviousness under § 103),¹¹ especially in light of the Federal Circuit’s past characterization of § 101 eligibility as a “coarse” gauge of the suitability of broad subject matter categories for patent protection. *Research Corp. Techs., Inc. v. Microsoft Corp.*, 627 F.3d 859, 869 (Fed. Cir. 2010). Given the evolving state of the

¹¹ Indeed, Judge Plager, in his dissent in *Dealertrack*, suggested that,

as a matter of efficient judicial process I object to and dissent from that part of the opinion regarding the ‘427 patent and its validity under § 101, the section of the Patent Act that describes what is patentable subject matter. I believe that this court should exercise its inherent power to control the processes of litigation . . . , and insist that litigants, and trial courts, initially address patent invalidity issues in infringement suits in terms of the defenses provided in the statute: “conditions of patentability,” specifically §§ 102 and 103, and in addition §§ 112 and 251, and not foray into the jurisprudential morass of § 101 unless absolutely necessary.

Dealertrack, 674 F.3d at 1335. But see *CLS Bank Int’l v. Alice Corp. Pty.*, 717 F.3d 1269, 1277 (Fed. Cir. 2013), *aff’d*, 134 S. Ct. 2347 (2014).

law, the § 101 analysis should be, and is, a difficult exercise.¹² At their broadest, the various decisions of the Federal Circuit¹³ would likely ring the death-knell for patent protection of computer-implemented inventions,¹⁴ a result not clearly mandated (at least not yet). On the other hand, to recognize and articulate the requisite degree of specificity - either in the equipment used¹⁵ or the steps claimed¹⁶ - that transforms an abstract idea into patent-eligible subject matter is a challenging task. In trying to sort through the various iterations of the § 101 standard, the court looks to *DDR* as a benchmark; i.e., the claims (informed by the specification) must describe a problem and solution rooted in computer technology, and the solution must be (1) specific enough to preclude the risk of pre-emption, and (2) innovative enough to “override the routine and conventional” use of the computer. *DDR*, 773 F.3d at 1258-59. The pre-emption concern is generally amenable to review in the context of a motion to dismiss or for

¹² And, therefore, not an exercise that lends itself to, e.g., shifting fees pursuant to 35 U.S.C. § 285.

¹³ See, e.g., *Dealertrack*, where the claim was about as specific as that examined in *DDR*, yet the Federal Circuit found the patent deficient because it did “not specify how the computer hardware and database [were] **specially programmed** to perform the steps claimed in the patent,” 674 F.3d at 1333-34 (emphasis added). The disclosure of such programming details would likely nullify the ability of a patentee to enforce the patent, given the ease with which software can be tweaked and still perform the desired function.

¹⁴ Ironically so, given the national concerns about piracy of American intellectual property.

¹⁵ See, e.g., *SiRF Tech., Inc. v. Int’l Trade Comm’n*, 601 F.3d 1319 (Fed. Cir. 2010), a case where the Federal Circuit found that a GPS receiver was “integral” to the claims at issue. The Court emphasized that a machine will only “impose a meaningful limit on the scope of a claim [when it plays] a significant part in permitting the claimed method to be performed, rather than function solely as an obvious mechanism for permitting a solution to be achieved more quickly, i.e., through the utilization of a computer for performing calculations.” *Id.* at 1333.

¹⁶ See, e.g., *DDR*, 773 F.3d at 1257-58; *TQP Dev., LLC v. Intuit Inc.*, Civ. No. 12-180, 2014 WL 651935 (E.D. Tex. Feb. 19, 2014); *Paone*, 2015 WL 4988279.

judgment on the pleadings. The second requirement, which may well involve issues of fact relating to the state of the art in the technological environment involved, is more appropriately addressed after discovery in the context of a motion for summary judgment.

B. Claim Construction

The Federal Circuit has “never set forth a bright line rule requiring district courts to construe claims before determining subject matter eligibility.” *Ultramercial, LLC v. Hulu, LLC*, 657 F.3d 1323, 1325 (Fed. Cir. 2011), vacated sub nom. *WildTangent*, 132 S.Ct. 2431 (2012). “Although the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter, claim construction is not an inviolable prerequisite to a validity determination under § 101.” *Content Extraction*, 776 F.3d at 1349 (citing *Ultramercial*, 772 F.3d at 714-15; *Bancorp*, 687 F.3d at 1273-74). However, it may be “desirable—and often necessary—to resolve claim construction disputes prior to a § 101 analysis.” *Bancorp*, 687 F.3d at 1273-74.

The parties have not raised issues of claim construction. The parties argue for and against invalidity based on the “character” of the patents and the claim language. Having reviewed the patents and briefing, the court concludes it may proceed with a § 101 analysis.

C. The Patents-in-Suit

The ‘101 patent “relates generally to translation of query and retrieval of multilingual information on the web.” It describes “a method and system for conducting a translingual search on the Internet and accessing multilingual websites through dialectal standardization, pre-search translation and post-search translation.” (‘101

patent, 1:9-14) The specification states that “most of the [Internet] search tools cater primarily to the needs of the English speaking Internet user. This attribute renders these search tools almost useless to the non-English speaking Internet users who constitute as much as 75% of the Internet user population.” (‘101 patent, 2:14-18) The patent provides the following example of the problem:

[W]hen preparing a Chinese To-fu dish which calls for “shrimp caviare,” a search was made on a super engine, such as Altavista.com to check the availability of “shrimp caviare” anywhere in the world. A search using Altavista.com under “all language” revealed no matching results under either “English” or “Chinese” setting. A search was then made for the English term “shrimp caviare” at China.com, which is a Chinese search engine, but to no avail. Subsequently, the term “shrimp caviare” was looked up in Chinese to find its Chinese equivalent. The Chinese equivalent thus found was “xiazi” (meaning, “shrimp roe”). This word was then used for making the search on China.com and yielded as many as twenty-four hits.

(‘101 patent, 2:32-44)

The patent purports to solve this problem with a three-stage process and system: “dialectal standardization, pre-search engine translation, and post search engine translation.” (‘101 patent, 5:1-4) The dialectal standardization identifies a keyword from an input query and standardizes it to a commonly known word. (‘101 patent, 5:24-67) Examples of dialectal variations in British versus American English “include centre vs. center, lorry vs. truck, queue vs. line and petrol vs. gasoline.” (‘101 patent, 5:40-43) The pre-search translation “translates the standardized keyword into an equivalent in a target language.” The translated keyword is then used in a search engine of the target language. (‘101 patent, 6:5-13) The post-search translation is used to translate the search results into the source language. The user “selectively highlight[s] the portions that he/she desires to be translated and . . . enter[s] an appropriate command or

select[s] an appropriate option.” (‘101 patent, 6:33-36) The user may choose either a “machine translation” or a “well translated version.” (‘101 patent, 6:41-53) Claim 1 recites:

A method for performing a contextual search and retrieval of documents in a computer network, comprising:

receiving through an input device, a query in a first language;

processing said query to extract at least one content word from the query;

performing dialectal standardization of the at least one content word extracted from the query;

translating the at least one dialectally standardized content word into a second language through a translator;

performing a contextual search in the second language based on the at least one translated content word, using a search engine in the second language; and

obtaining the search results in the second language in the form of at least one of site names (URLs) and documents, satisfying a search criteria.

(‘101 patent, 7:66-8:15)

The ‘154 patent is a continuation-in-part of the ‘101 patent and incorporates the ‘101 patent by reference. (‘154 patent, 1:6-17) The ‘154 patent incorporates a system and method “to send a user one or more advertisements in his native language, also called as source language, over the Internet while the user is performing a cross language search.” (‘154 patent, 3:8-12, 4:23-29) More specifically, “the server conducts a search in the database and returns to the user one or more advertisements relevant to the content word or keyword.” The advertisements are either in the source

language or may be translated by the server from a target language. ('154 patent, 4:40-49)

Claim 1 recites:

A method for providing cross language advertising for a user while the user is performing a contextual search and retrieval of documents in a computer network, the method comprising the steps of:

receiving from the user through an input device a query in a first language;

processing the query to extract at least one content word from the query;

performing dialectal standardization of the content word extracted from the query;

translating the dialectally standardized content word into a second language through a translator;

performing a contextual search in the second language based on the translated content word, using a search engine in the second language;

returning to the user the search results in the second language in the form of at least one of site names (URLs) and documents;

searching a database of advertising cues; and

returning to the user one or more of the advertising cues relevant to the content word.

('154 patent, 10:4-24)

D. Analysis

Applying the analytical framework of *Alice*, the court first “determine[s] whether the claims at issue are directed to one of those patent-ineligible concepts,” namely, laws of nature, natural phenomena, and abstract ideas. 134 S.Ct. at 2354-55. Defendant

analogizes the method of the '101 patent¹⁷ to a set of tasks performed by a human,¹⁸ concluding that the '101 patent is directed to the abstract idea of searching for documents in a foreign language by translating a modified search request. (D.I. 10 at 10) According to defendant, the '154 patent recites the subject matter of the '101 patent (abstract idea of translingual searching) and then adds two targeted advertising steps, i.e., showing ads based on a user's activity. Defendant concludes that the '154 patent is directed to two abstract ideas – translingual searching and advertising. (D.I. 10 at 15-17)

That a method involving a computer and the internet may be broken down into a series of steps performed by a human does not resolve whether such method is an “abstract idea.” The continuum begins with methods that “merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet” and progresses towards methods where “the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” *DDR*, 773 F.3d at

¹⁷ Defendant presented its arguments using claim 22 as a representative claim, with reference to the other claims as needed. (D.I. 10 at 5) In its answering brief, plaintiff withdraws its allegations as to claim 22 and avers that claim 1 is more representative of the '101 patent. (D.I. 15 at 2-3, 13-14) Defendant addresses the similarities of claims 1 and 22 in its reply brief. The court treats claim 1 of the '101 patent as representative. See, *Content Extraction*, 776 F.3d at 1348 (agreeing with the district court that certain claims were “representative, because all the claims are ‘substantially similar and linked to the same abstract idea.’”).

¹⁸ A bilingual human can identify a keyword; translate it into another language; and then use the translated keyword to search a newspaper for relevant articles. A monolingual human can use a thesaurus to determine a commonly used keyword and dictionaries to translate the keyword. The translated keyword may then be searched in library call cards. Translation of the search results may be performed by a human translator. (D.I. 10 at 6-8)

1257. The methods at bar do not perform a business method known from the pre-Internet world on the computer, instead, the methods contain an additional layer of complexity. The methods of the '101 patent "address the problem of ensuring that Internet search engines retrieve not only Web pages and documents written in the query language (source), but in foreign (target) languages as well." (D.I. 15 at 9) The methods of the '154 patent¹⁹ perform translingual searches and use them to display cross-language advertising to the user of the search engine." (D.I. 15 at 17-18)

The court turns to step two of the *Alice* framework. The method of the '101 patent provides a specific series of steps designed to optimize search results and retrieve target language URLs or documents using search engine queries on the Internet. The steps include extracting content words from a query, performing dialectal standardization of the words, and translation. (D.I. 15 at 12-14) As in *DDR*, the "claims at issue here specify how interactions with the Internet are manipulated to yield a desired result." *Id.* at 1258. The '154 patent recites similar steps for translingual searching and adds the concept of searching a database of advertising to return advertising targeted to the content word. (D.I. 15 at 18-19) The court concludes that the solution provided by the patents at issue is not a "routine and conventional" use of computer and Internet technology. Although the patents at issue use computers, the methods recite sufficiently specific steps, so as to ensure that the claims are "more than

¹⁹ Plaintiff asserts that the '154 patent is appropriately represented by claim 1. Plaintiff argues that since defendant did not address the remainder of the claims, no conclusion may be reached as to their validity. This ignores the concept of a representative claim. Moreover, plaintiff did not identify a claim which would compel a different result under the § 101 analysis. The court treats claim 1 of the '154 patent as representative. See, *Content Extraction*, 776 F.3d at 1348.

a drafting effort designed to monopolize the [abstract idea],” and will not disproportionately tie up the use of the underlying ideas. *Alice*, 134 S.Ct. at 2354, 2357; *Mayo*, 132 S.Ct. at 1294.

V. CONCLUSION

For the foregoing reasons, defendant’s motion to dismiss (D.I. 9) is denied. An appropriate order shall issue.

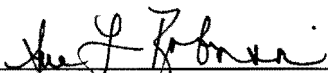
IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

| | | |
|----------------------|---|---------------------|
| IMPROVED SEARCH LLC, |) | |
| |) | |
| Plaintiff, |) | |
| |) | |
| v. |) | Civ. No. 15-262-SLR |
| |) | |
| AOL INC., |) | |
| |) | |
| Defendant. |) | |

ORDER

At Wilmington this *12th* day of March, 2016, consistent with the memorandum opinion issued this same date;

IT IS ORDERED that defendant's motion to dismiss (D.I. 9) is denied.



United States District Judge