IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

NETWORK CONGESTION SOLUTIONS, LLC, Plaintiff, v. UNITED STATES CELLULAR CORPORATION, Defendant.	)	Civ. No. 14-903-SLR

NETWORK CONGESTION SOLUTIONS, LLC, Plaintiff, v. WIDEOPENWEST FINANCE, LLC, Defendant.	)	Civ. No. 14-904-SLR

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MEMORANDUM OPINION

Dated: March 22, 2016
Wilmington, Delaware

ROBINSON, District Judge

I. INTRODUCTION

On July 9, 2014, plaintiff Network Congestion Solutions, LLC ("plaintiff") filed a complaint alleging infringement of U.S. Patent No. 6,826,620 ("the '620 patent") against defendant United States Cellular Corporation ("US Cellular") (D.I. 1)[1] and defendant WideOpenWest Finance, LLC ("WOW") (collectively "defendants") (Civ. No. 14-904, D.I. 1). Plaintiff filed first amended complaints against each defendant on June 30, 2015.[2] (D.I. 20; Civ. No. 14-904, D.I. 17) Presently before the court are defendants' motions to dismiss. (D.I. 22; Civ. No. 14-904, D.I. 19) 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 Delaware with its principal place of business in Fort Worth, Texas. (D.I. 1 at ¶ 1) Defendant US Cellular is a corporation organized under the laws of the State of Delaware with its principal place of business in Chicago, Illinois. (D.I. 1 at ¶ 2) Defendant WOW is a company organized under the laws of the State of Delaware with its principal place of business in Englewood, Colorado. (Civ. No. 14-904, D.I. 1 at ¶ 2) The '620 patent, titled "Network Congestion Control System and Method," was filed on May 3, 1999 and issued November 30, 2004.

III. STANDARD OF REVIEW

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[1] All citations are to Civ. No. 14-903 unless otherwise indicated.

[2] After the court denied defendants' motions to dismiss the complaints for failure to state a claim without prejudice to renew. (D.I. 17, 18; Civ. No. 14-904, D.I. 15, 16)

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).[3]

"[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

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[3] The machine-or-transformation test still may provide a "useful clue" in the second step of the *Alice* framework. *Ultramercial, 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-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.

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,[4] the first step of *Alice* is, for the most part, a given; i.e., computer-implemented patents generally involve 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.[5] 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

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[4] 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).

[5] 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

> 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

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> (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
> (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).

> 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*.

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.[6] For instance, in *Intellectual Ventures*, a case that also presented claims directed at websites,[7] the Court explained that, "[a]t step one of

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[6] *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).

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

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.[8]

> 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.

Intellectual Ventures, 792 F.3d at 1368.

[8] 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.

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."[9] *Id.* at 1370. The Federal Circuit explained:

> 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.[10]

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

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

[9] 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 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.

[10] But recall the "store within a store" pre-Internet analog rejected in *DDR*.

patentability for computer programs[11] to the almost complete acceptance of such,[12] to 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),[13] especially in light of the Federal

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[11] *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.

[12] *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).

[13] 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).

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 law, the § 101 analysis should be, and is, a difficult exercise.[14] At their broadest, the various decisions of the Federal Circuit[15] would likely ring the death-knell for patent protection of computer-implemented inventions,[16] 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 used[17] or the steps claimed[18] - 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

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

[15] *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.

[16] Ironically so, given the national concerns about piracy of American intellectual property.

[17] *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.

[18] *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.

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 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.

Although plaintiff argues that the present motion is premature (in part because it precedes claim construction), plaintiff states that "a better way" to resolve the patentability issue in the case at bar is for the court to rule on the present motion. (D.I. 24 at 11) The parties' arguments address the broader concepts of the '620 patent. Neither party points to any particular claim limitation as either needing construction to

further the analysis or preventing the court from conducting a proper § 101 analysis. As such, the court concludes it may proceed with a § 101 analysis.

C. The '620 Patent

The specification explains that:

> Most contemporary communication networks, such as frame relay and asynchronous transfer mode (ATM) networks, provide congestion notification mechanisms to the network user at the point of ingress/egress to the network. Unfortunately, the user equipment at the edge of the network, which is typically a router, generally ignores any congestion notifications since this equipment is normally implementing the network layer and has no ability to control the flow of data at the end user session. The result is that when a user session is sending data at a rate higher than the network can handle, congestion builds within the network until the network starts discarding data.

(4:29-37; 5:11-15) Using a priority queuing device at the ingress point of the network allows higher priority traffic to get through during periods of congestion, but is reactive and "under periods of heavy congestion it falls back to merely discarding traffic in order to relieve the congestion." (5:45-57) The invention describes "a system and method for allowing a device located at the ingress/egress point of a communication network to monitor congestion notifications at the data link layer of the communication network, and proactively rate control the end user session(s) in response thereto." The communication device at the edge of the network monitors "the data streams coming out of the communication network for congestion notifications," and "actively rate control[s] the end user application sessions based on such congestion notifications to alleviate the network congestion." This allows a network to avoid congestion reaching the point where the network has to discard data." (5:66-6:12)

Claim 1 recites:

> A method for alleviating congestion in a communication network, the communication network enabling the flow of data to and from a plurality of end user devices that are connected to the network through a plurality of communication devices, the method comprising the steps of:
>
> monitoring data flows to and from the plurality of end user devices for indications of congestion; and
>
> controlling the data rate of at least one end user device in response to said congestion indications.

(12:29-37) Claim 6 recites

> A system for alleviating congestion in a communication network, the communication network enabling the flow of data to and from a plurality of end user devices that are connected to the network through a plurality of communication devices, comprising:
>
> means for monitoring data flows to and from the plurality of end user devices for indications of congestion; and
>
> means for controlling the data rate of at least one end user device in response to said congestion indications.

(12:52-60) Claim 13 is directed to a computer program. (13:13-23)

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. Defendants argue that the patent is directed to the abstract idea of "resource control management, namely managing resource flow by monitoring the usage of a resource, and then controlling that usage based on that monitoring." (D.I. 23 at 6) Defendants analogize the claims at bar to resource management performed by a human such as a TSA worker at an airport checkpoint or a factory line supervisor of widgets down a production assembly line. (D.I. 23 at 7-8) Defendants also argue that the steps could be

performed mentally by a network engineer, who could "control the data rate" of a particular computer by shutting it down or removing it from the network. (D.I. 23 at 9)

The Supreme Court stated in Alice, "[a]t some level, 'all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.'" *Alice*, 134 S.Ct. at 2354 (quoting *Mayo*, 132 S.Ct. at 1293). In the case at bar, claims 1 and 6 are directed to "alleviating congestion in a communication network" and recite steps used to perform the method for a flow of data to and from end user devices connected to a network through communication devices. That defendants are able to come up with a human equivalent of "resource control management" does not render the claims at bar similar to 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." *DDR*, 773 F.3d at 1257. Instead, the claims at bar are more analogous to those in *DDR* and "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." *Id.*

The court turns to step two of the *Alice* framework. The claims address the problem of "network congestion" in a defined environment, which includes end user devices and communication devices. Although defendants argue that the environment and devices are well known in the prior art and cannot provide an inventive concept, the claim as a whole (the equipment recited and steps claimed) provides the requisite degree of specificity. Moreover, the claims are directed to a solution for a problem that arises in the computer context. This specificity also suffices to alleviate concerns of pre-emption. *Alice*, 134 S.Ct. at 2354; *Mayo*, 132 S.Ct. at 1294. Having considered the parties' arguments, the court declines to dismiss on this record.

V. CONCLUSION

For the foregoing reasons, defendants' motion to dismiss (D.I. 22; Civ. No. 14-904, D.I. 19) is denied. An appropriate order shall issue.