IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

DEVICE ENHANCEMENT LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civ. No. 15-762-SLR
	)	
AMAZON.COM, INC.,	)	
	)	
Defendant.	)	

Brian E. Farnan, Esquire and Michael J. Farnan, Esquire of Farnan LLP, Wilmington, Delaware. Counsel for Plaintiff. Of Counsel: Paul A. Bondor, Esquire and Jeffrey S. Seddon, Esquire of Desmarais LLP.

Karen Jacobs, Esquire and Megan E. Dellinger, Esquire of Morris, Nichols, Arsht & Tunnell LLP, Wilmington, Delaware. Counsel for Defendant. Of Counsel: Adam K. Mortara, Esquire and Katherine L.I. Hacker, Esquire of Bartlit Beck Herman Palenchar & Scott LLP.

MEMORANDUM OPINION

Dated: May 17, 2016
Wilmington, Delaware

ROBINSON, District Judge

I. INTRODUCTION

On August 31, 2015, plaintiff Device Enhancement LLC ("plaintiff") filed a complaint alleging infringement of U.S. Patent No. 7,747,683 ("the '683 patent") against defendant Amazon.com Inc. ("defendant"). (D.I. 1) Presently before the court is defendant's motion to dismiss. (D.I. 11) The court has jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

II. BACKGROUND

Plaintiff is a limited liability company organized and existing under the laws of the State of Delaware with its principal place of business in Ottawa, Canada. (D.I. 1 at ¶ 1) Defendant is a corporation organized and existing under the laws of the State of Delaware, with a place of business in Seattle, Washington. (D.I. 1 at ¶ 2) The '683 patent, titled "Method and System for Operating Applications for Remote Terminal Devices," was filed on December 28, 2006 and issued June 29, 2010.

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 pre-empt 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]

"[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

---

[1] 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.

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).

The Federal Circuit has recently provided guidance on step one of the *Alice* inquiry. Significantly, the Court in *Enfish, LLC v. Microsoft Corp.*, — F.3d —, 2016 WL 2756255 (Fed. Cir. May 12, 2016), addressed claims directed to software and concluded that such claims were **not** "inherently abstract and therefore only properly analyzed at the second step of the *Alice* analysis. Software can make non-abstract improvements to computer technology just as hardware improvements can, and sometimes the improvements can be accomplished through either route." *Id.* at *4. The proper inquiry under step one is "whether the focus of the claims is on the specific

asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool." *Id.* at *5. In finding § 101 patentability, the *Enfish* Court concluded that

> the plain focus of the claims[2] is on an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity.
>
> Accordingly, we find that the claims at issue in this appeal are not directed to an abstract idea within the meaning of *Alice*. Rather, they are directed to a specific improvement to the way computers operate, embodied in the self-referential table.

Id. In this regard, the claims at issue were "not simply directed to **any** form of storing tabular data, but instead are specifically directed to a **self-referential** table for a computer database." *Id.* at *6 (emphasis in original).

> In sum, the self-referential table recited in the claims on appeal is a **specific** type of data structure designed to improve the way a computer stores and retrieves data in memory . . . . In other words, we are not faced with a situation where general-purpose computer components are added post-hoc to a fundamental economic practice or mathematical equation. Rather, the claims are directed to a **specific** implementation of

---

[2] Specifically, claim 17 of U.S. Patent No. 6,151,604 ("the '604 patent") recites:

> A data storage and retrieval system for a computer memory, comprising:
>
> means for configuring said memory according for a logical table, said logical table including:
>
> a plurality of logical rows, each said logical row including an object identification number (OID) to identify each said logical row, each said logical row corresponding to a record of information;
>
> a plurality of logical columns intersecting said plurality of logical rows to define a plurality of logical cells, each said logical column including an OID to identify each said logical column; and
>
> means for indexing data stored in said table.

2016 WL 2756255 at *5.

> a solution to a problem in the software arts. Accordingly, we find the claims at issue are not directed to an abstract idea.
>
> Because the claims are not directed to an abstract idea under step one of the *Alice* analysis, we do not need to proceed to step two of that analysis.

Id. at *8 (emphasis added).

In *DDR Holdings, LLC v. Hotels Com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), the Federal Circuit blurred the lines between steps one and two.[3] The claims at issue in *DDR* involved computer technology directed at retaining website visitors.[4] In its

---

[3] "[I]dentifying the precise nature of the abstract idea is not as straightforward as in *Alice* or some of our other recent abstract idea cases. . . . But as discussed below, under any of these characterizations of the abstract idea, the . . . claims [of U.S. Patent No. 7,818,399 ("the '399 patent)] satisfy *Mayo/Alice* step two." 773 F.3d at 1257.

[4] Representative claim 19 of the '399 patent 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
> (iv) using the data retrieved, automatically generate and transmit to the web browser a second web page that displays:

analysis, the Federal Circuit rejected the notion that the pre-Internet analog to the claims at issue ended the inquiry, explaining that while

> 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*.

> (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).

Turning to the second step of *Alice*, the Federal Circuit in *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363 (Fed. Cir. 2015),[5] concluded that the claims at issue presented no inventive concept "that would support patent eligibility."[6] *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.

---

[5] A case that also presented claims directed at websites, wherein 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.

Intellectual Ventures, 792 F.3d at 1368.

[6] 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.

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.[7]

Id. at 1371 (citations omitted) (emphasis added).

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 only preserved the validity of one other computer-implemented invention under § 101, that disclosed in *Enfish*.[8]

---

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

[8] *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).

As noted by the Federal Circuit in *DDR*, § 101 jurisprudence has evolved from the complete rejection of patentability for computer programs,[9] to the almost complete acceptance of such,[10] to the still difficult-to-discern requirements of the *Alice* analysis. *Compare, e.g., Enfish*, 2016 WL 2756255 at *4-7, *with Intellectual Ventures*, 792 F.3d at 1371. Moreover, it remains less than clear how a § 101 inquiry that is focused through the lens of specificity should 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 law, the § 101 analysis should be, and is, a difficult

---

[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).

[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).

exercise.[12] In trying to sort through the various iterations of the § 101 standard, the court looks to *Enfish* and *DDR* as the benchmark in software and computer cases. At step one of the *Alice* analysis, the claims (informed by the specification) must describe a problem and solution rooted in computer technology and the solution must be specific enough to preclude the risk of pre-emption. At step two, the claimed solution must be innovative enough to "override the routine and conventional" use of the computer. *Enfish*, 2016 WL 2756255 at *7-8; *DDR*, 773 F.3d at 1258-59.[13]

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.

Plaintiff posits that "claim construction will provide additional evidence of the inventive concepts inherent in the claim elements and will further rebut [d]efendants'

---

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

[13] Step one is generally amenable to review in the context of a motion to dismiss or for judgment on the pleadings. *Alice*'s second step, 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.

arguments that the claimed components are not sufficiently defined." More specifically, plaintiff identifies potential constructions of "content delivery applications" as "applications that deliver[] audio or visual content, which may be electronic games, enterprise applications, multi-users applications, information rendering, 3-D graphical presentation, multimedia, voice, location based application, digital content, music or video/TV presentation," (3:55-58); "logic" as "instructions for how an application handles events and uses information," (4:34-35, 5:17-25); and "graphical processing" as "deliver, in real-time, the processed image or graphical data in a format that is optimized to the capabilities of the specific device, such as the display size, resolution, colors, intensity, etc." (4:38-44) (D.I. 14 at 17) Defendant, in response, embraces plaintiff's constructions to argue that such broad constructions do not impart any specificity on the patent claims. The court addresses plaintiff's concerns below.

C. The '683 Patent

The '683 patent "relates to a method and system for allowing a user of a terminal device to remotely operate upgraded and/or advanced applications without the need for upgrading the client side application or computational resources." (1:15-18) The patent identifies prior art methods which "have not yet provided satisfactory solutions to the problem of providing design tools of mobile applications that do not require adaptation of the client-side application to each terminal device, and that react in real-time to the state of the application and to the capabilities of the terminal device." (2:28-33) The patent aims to solve this problem and "provide design tools of applications that can be easily developed and implemented across platforms such as mobile devices and TV's." (2:57-60) The specification describes:

> The resources are the memory capacity, processing capacity, multimedia capabilities, graphical capabilities (display size, resolution, colors, 3d, processing power etc.), wireless features, such as BlueTooth (BT), GPS, J2ME capabilities (Java 2 Platform, Micro Edition[] is a technology that allows programmers to use the Java programming language and related tools to develop programs for mobile wireless information devices such as cellular phones), add-on devices and add-on software, operating system capabilities, profile representing the specification of the terminal device, or any combination thereof.
>
> . . .
>
> The data network may be the Internet; a cellular data network; a satellite data network; a wireless data network, a computer network, a digital data transfer network, a cable TV. The terminal device may be a cellular telephone, a PDA, a satellite phone, any electronic unit capable of executing software, a computing device capable of executing software or a TV or TV Set-top box.
>
> . . .
>
> The content delivery applications may be electronic games, enterprise applications, multi-users applications, information rendering, 3-D graphical presentation, multimedia, voice, location based application, digital content, music or video/TV presentation.

(3:26-58)

The specification explains that "each content providing application is executed by a combination of a remote (server) application that runs on a server that is connected to a data network and a client-side component, which is generic and installed on each terminal device." A "change, upgrade or adaptation of an application" is made not "in the client-side component, but . . . in the remote application on the server." (4:10-20) The system of the invention is divided into layers, with each layer performing a required task. The remote server "implements [three] layers:" a communication layer (includes an interface and is used for data communication), the client adaption layer (generates presentations of complex data at high speeds and real-time processing), and an

application layer (supports connectivity with client-side applications of the terminal devices). The client layer "implements two layers:" a client communication layer (includes an interface between the mobile terminal device and the remote server) and a client application layer (includes the computation capabilities for executing the client-side application on the mobile terminal device). (4:45-5:53) The specification also states that the method can be implemented "to other remote devices which are not mobile or portable, but in order to provide a desired content, are connected to a remote server over a data network and that are considered to be resource-constrained (comparing to a desktop computer)." (5:61-67) The specification explains that "the invention **can be carried out in a great variety of ways**, employing more than one technique from those described above, all without exceeding the scope of the invention." (6:3-7) (emphasis added)

Claim 1 recites:

> A method for allowing a user of a mobile terminal device having predetermined computational resources and inherent capabilities to remotely develop and operate upgraded content delivery application(s), comprising:
>
> a) installing, on said terminal device, a generic client-side application designed to be compatible with different terminal devices with different inherent capabilities;
>
> b) installing, on a server being in data communication with said mobile terminal device, a corresponding remote application for implementing the logic for each operated content delivery application and for performing, whenever required, most of the graphical processing according to said predetermined computational resources and inherent capabilities;
>
> c) allowing said server to exchange data with said terminal device;
>
> d) dynamically splitting, by said remote application, the tasks to be performed by said content delivery application between said client-side

application and remote application, according to said computational resources and inherent capabilities;

e) adaptively processing, by said remote application, the content and its associated logic and input data to be delivered to said mobile terminal device according to said computational resources and inherent capabilities;

f) transmitting the processed content to said mobile terminal device over said data network;

g) rendering said content by said client-side application; and

h) allowing the client-side application to respond to inputs from the user and/or to messages from the server or further connected devices.

(6:9-41)

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 describes the invention as the abstract idea of "division of labor," explaining that independent claim 1[14] divides ("dynamically splits") the labor ("tasks to be performed by a content delivery application") between computers ("client-side application and remote application") according to "computational resources and inherent capabilities." Defendant provides the court with examples of human division of labor as far back as Egyptian hieroglyphics. (D.I. 12 at 8-9) Plaintiff, on the other hand, argues that claim 1

[14] Plaintiff argues that defendant did not show that claim 1 is representative, pointing out that dependent claim 3 adds more specific computer terminology, i.e., "logic" or "application." The '683 patent contains one independent claim, which must be said to represent the invention embodied by the patent (and the dependent claims). *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.'").

is "a solution to the computer-specific problem of delivering multimedia content to a variety of devices with limited resources and different capabilities." Plaintiff directs the court's attention to the step of "dynamically splitting . . . the tasks" and the computer centric language and components used by the claim. According to plaintiff, "the invention is specifically directed to the computer-centric 'client-side application' and 'remote application,' specifically how to improve the functioning of the client-side application by offloading graphical processing to the remote-application." (D.I. 14 at 7-10)

That the method at bar[15] may be described as the abstract idea of division of labor does not provide the answer to step one of the *Alice* inquiry as, "[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.[16] Indeed, the Federal Circuit in *Enfish* reiterated the fact that the existence of a pre-Internet analog does not end the inquiry, so long as the "focus of the claims is on [a] **specific** asserted improvement in computer capabilities" rather than a process "for which computers are invoked merely as a tool." 2016 WL 2756255 at *5 (emphasis added). The Court in *Enfish* did not

---

[15] Using distributed architecture to enable remote adaptation of applications beyond the capabilities of an individual device.

[16] *See also, Paone v. Broadcom Corp.*, Civ. No. 15-0596, 2015 WL 4988279 (E.D.N.Y. Aug. 19, 2015), wherein the observation made by the district court 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).

address specificity in terms of pre-emption; nevertheless, and despite the blurring of *Alice*'s steps one and two in this regard, it is evident that there is a specificity requirement.[17] The Federal Circuit in *Enfish* emphasized that the claims at issue were directed to "a **specific implementation** of a solution to a problem in the software arts." *Id.* at *8 (emphasis added).

The court recognizes that the inventive concepts disclosed in the '683 patent are computer-centric. Independent claim 1, for instance, describes a method to "allow[] a user of a mobile terminal device having predetermined computational resources and inherent capabilities to remotely develop and operate upgraded content delivery application(s)." The various computer components disclosed in claim 1 cover a broad spectrum of devices and networks. The "terminal device" can be "any electronic unit capable of executing software," including a cellular phone and TV (3:45-48), and would include devices which are not mobile or portable (5:61-67). The content delivery application may be any form from a game to a "3-D graphical presentation" to a "location based application." (3:54-59) The client-side component is "generic." (4:12-13) The data network is similarly known and satisfied by a wide variety of networks from the Internet to a wireless data network to cable TV. (3:42-44)

The claimed method, then, generally provides for the installation of a generic client-side application on the terminal device and the installation of a corresponding remote application on the server (which handles most of the graphical processing). The

[17] The specificity requirement is not unique to the § 101 inquiry. In the context of patentability, the specificity requirement is analyzed under the legal construct of pre-emption, which focuses on whether the patent "would risk disproportionately tying up the use of the underlying ideas." *Alice*, 134 S. Ct. at 2354; *Mayo*, 132 S. Ct. at 1294.

server exchanges data with the terminal device. Tasks are split between the client-side application and the remote application, albeit without further guidance from the patent. The processed content is then transmitted and the client-side application renders the content and responds to messages.

The question such a broad disclosure poses is whether the patent – although computer-centric – would pre-empt substantially all uses of the underlying ideas at issue, that is, using distributed architecture to increase the capabilities of individual devices by using remote resources. Although, at this time, the degree of specificity required to pass muster under pre-emption[18] is not at the micro-level (e.g., source code), the disclosures of the '683 patent are at the macro-level, that is, the patented method uses computerized devices (of any type) in conventional ways (installation of applications, data exchange, and data processing) without delineating any particular way of putting the ideas into practice.[19]

Consistent with the holding in *Diamond v. Diehr*, 450 U.S. 175 (1981), a distinction must be drawn between claims that seek to pre-empt the use of an abstract idea, and claims that seek only to foreclose others from using a particular application of that idea. *See id.* at 187. Here, it appears that the '683 patent pre-empts virtually all possible ways of performing the claimed method because the very steps of the method comprise nothing more specific than the underlying idea itself. In other words, "the

---

[18] Step one of the *Alice* analysis.

[19] Again, the focus of the Federal Circuit's analysis in *Enfish* was the fact that "the self-referential table recited in the claims on appeal **is a specific type of data structure** designed to improve the way a computer stores and retrieves data in memory." 2016 WL 2756255 at *8 (emphasis added).

claim's tie to a digital computer [does] not reduce the pre-emptive footprint of the claim since all uses of the [idea are] still covered by the claim." *Bilski I*, 545 F.3d at 955.[20]

V. CONCLUSION

For the foregoing reasons, defendant's motion to dismiss (D.I. 11) is granted. An appropriate order shall issue.

[20] The fact that there are alternative, prior art ways of accomplishing the abstract idea does not necessarily advance the analysis where, as here, there is no explanation in the patent as to how the real-time feature of the inventive concept is implemented.