record, this 31st day of August, 2015, by the United States District Court for the District of Maryland,

ORDERED, that Defendants' Motion for Attorneys' Fees and Costs Pursuant to 17 U.S.C. § 505 (ECF No. 178) is hereby **GRANTED;** and it is further

ORDERED, that attorneys' fees in the amount of **$741,785.00** and nontaxable costs in the amount of **$435,735.00**[1] are hereby **AWARDED** to Defendants; and it is further

ORDERED, that Plaintiff's Rule 60(d)(1) and 60(d)(3) Motion to Set Aside Judgment for Fraud on the Court (ECF No. 210) is hereby **DENIED;** and it is further

ORDERED, that the Withdrawal of Appearance of Bradley A. Thomas, Esq. as Counsel for the Plaintiff Bryant Moore (ECF No. 211) is hereby **GRANTED,** and the appearance of Bradley A. Thomas is hereby **STRICKEN;** and it is further

ORDERED, that the Consent Motion to Withdraw Appearance of Donald M. Temple, Esq. (ECF No. 212) is hereby **GRANTED,** and the appearance of Donald M. Temple is hereby **STRICKEN;** and it is further

ORDERED, that the Motion for Withdrawal of Appearance (ECF No. 214) is hereby **GRANTED,** and the appearance of Glenn F. Ivey is hereby **STRICKEN;** and it is further

ORDERED, that the Clerk is hereby **DIRECTED** to mail a copy of this Order to Plaintiff Bryant Moore at 4710 Mangum Road, College Park, MD 20740.

[redacted]

INTELLECTUAL VENTURES I LLC, et al., Plaintiffs,

v.

CAPITAL ONE FINANCIAL CORP., et al., Defendants.

Case No. PWG–14–111.

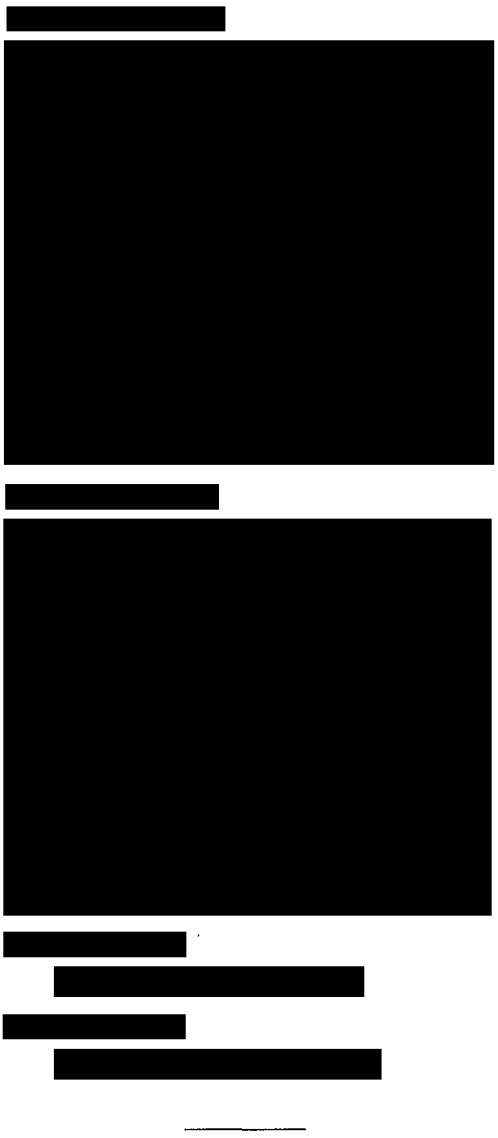
United States District Court, D. Maryland, Southern Division.

Signed Sept. 2, 2015.

[redacted]

1. An Order of the Clerk of this Court was entered on August 31, 2015 awarding taxable costs in the amount of $30,028.25. ECF No. 218.

[redacted]



Michael Edward McCabe, Jr., Bryan D. Bolton, Funk and Bolton PA, Baltimore, MD, Clayton Walter Thompson, II, David L. Alberti, Ian Neville Feinberg, Jeremiah Armstrong, Marc Belloli, Margaret Elizabeth Day, Nickolas Bohl, Sal Lim, Vinay Malik, Yakov Zolotorev, Feinberg Day Alverti and Thompson LLP, Menlo Park, CA, Daniel J. Weinberg, Rachel B. Kinney, Robert E. Freitas, Freitas Angell and Weinberg LLP, Redwood Shores, CA, David Taylor Rudolph, Eric B. Fastiff, Lieff Cabraser Heimann and Bernstein LLP, San Francisco, CA, for Plaintiffs.

Mary Catherine Zinsner, Lesley Whitcomb Fierst, Syed Mohsin Reza, Troutman Sanders LLP, Tysons Corner, VA, Matthew Moore, Adam M. Greenfield, Elizabeth V. Johnson, Gabriel K. Bell, Latham and Watkins LLP, Washington, DC, Andrew Jay Graham, James P. Ulwick, Kramon and Graham PA, Baltimore, MD, Brent P. Ray, David W. Higer, Joel Merkin, Kenneth R. Adamo, Kristina Hendricks, Megan M. New, Ryan M. Hubbard, Vishesh Narayen, Kirkland and Ellis LLP, Kristopher Davis, Latham and Watkins, Chicago, IL, Christopher St. John Yates, Latham & Watkins LLP, San Francisco, CA, Clement Naples, Latham and Watkins LLP, New York, NY, Ethan Y. Park, Jeffrey G. Homrig, Katherine M. Schon, Michelle Patricia Woodhouse, Patricia Young, Latham and Watkins LLP, Menlo Park, CA, Megan C. Rahman, Robert A. Angle, Christopher J. Forstner, Dabney J. Carr, IV, Troutman Sanders LLP, Richmond, VA, Paul E. McGowan, Troutman Sanders LLP, Atlanta, GA, for Defendants.

MEMORANDUM OPINION

PAUL W. GRIMM, District Judge.

This patent litigation concerns four patents [1] that Plaintiffs/Counter–Defendants

1. The patents at issue are United States Patent No. 7,984,081, entitled "System and Method for Non–Programmers to Dynamically Manage Multiple Sets of XML Document Data" (the "'081 Patent"); United States Patent No. 6,546,002, entitled "System and Method for Implementing an Intelligent and Mobile Menu–Interface Agent" (the "'002 Patent"); United States Patent No. 6,314,409, entitled "System for Controlling Access and Distribution of Digital Property," (the "'409 Patent"); and United States Patent No. 6,715,084, entitled "Firewall System and Method Via Feedback from Broad–Scope

Intellectual Ventures I LLC and Intellectual Ventures II LLC (together, "Intellectual Ventures companies" or "IV") own and claim Defendants/Counterclaimants Capital One Financial Corp., Capital One Bank (USA), N.A., and Capital One, N.A. (collectively, "Capital One companies"), are infringing. The Capital One companies admit use but insist that the patents are invalid. Currently pending are the parties' cross-motions for summary judgment on patent invalidity under 35 U.S.C. § 101, and the Special Master's Reports and Recommendations on the motions, in which he recommends findings of patent validity as to the '081 Patent and the '002 Patent, and findings of invalidity as to the '409 Patent and the '084 Patent.[2] The Capital One companies also filed, as a supplement to their summary judgment motion and their objections to the Special Master's Report and Recommendation on the '081 & '002 Patents, ECF No. 337, the Federal Circuit's recent decision in *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 792 F.3d 1363 (Fed.Cir.2015). I have considered the parties' oral arguments and reviewed the record, including the supplemental briefing I requested from counsel, and decided *de novo* all of the parties' objections to the Special Master's Reports and Recommendations, pursuant to Fed. R.Civ.P. 53(f)(3)-(4). With regard to the '081 & '002 Patents, the Special Master gave careful consideration to the facts and the parties' arguments, and therefore I will adopt his factual findings. However, when he issued his Report and Recommendation, he did not have the benefit of *Intellectual Ventures I*, 792 F.3d 1363, which is particularly relevant when evaluating the validity of the '081 and '002 Patents. Nor did he address in any depth the increasing number of cases that have been decided by the Federal Circuit and District Courts around the country that have been decided since the Supreme Court's recent decisions in *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, —— U.S. ——, 134 S.Ct. 2347, 189 L.Ed.2d 296 (2014), and *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, —— U.S. ——, 132 S.Ct. 1289, 182 L.Ed.2d 321 (2012), that have found patents that are highly analogous to the '081 and '002 patents to be invalid for abstractness under 35 U.S.C. § 101. Therefore, I must reject the Special Master's conclusions of law as to the '081 & '002 Patents, grant Defendants' motions as to these patents, and deny Plaintiffs' motions as to these patents. The motions regarding the'409 & '084 Patents remain pending.[3]

Monitoring for Intrusion Detection" (the "'084 Patent").

2. Plaintiffs seek partial summary judgment "on the third affirmative defense and counterclaim counts four, six, eight and ten, based on Capital One's claim of invalidity under 35 U.S.C. § 101." Pls.' Cross–Mot. 1. The parties fully briefed their motions, ECF Nos. 147, 169, 227, 246, and submitted letter briefs in response to questions that the Special Master posed, ECF Nos. 298–1, 298–2. They also submitted briefs regarding whether the '084 and '409 Patents are invalid based on issue preclusion, as a recent ruling from the Southern District of New York found them invalid in separate litigation. ECF Nos. 297, 300, 303. The Special Master submitted a Report and Recommendation on the '081 and '002 Patents ("R & R on '081 & '002 Patents"), ECF No. 298, and the parties fully briefed their objections, ECF Nos. 307, 313, 319, 326 (Defs.' Notice of Supplemental Authority), 337 (same); *see* ECF No. 143 (Order Appointing Special Master, providing for objections to be filed in accordance with Rule 53(f), responses to objections to be filed within fourteen days thereafter, and replies within seven days thereafter). He also submitted a Report and Recommendation on the '084 and '409 Patents and issue preclusion ("R & R on '084 & '409 Patents"), ECF No. 315, for which the parties again fully briefed their objections, ECF Nos. 324, 325, 330, 335, 336, 344. Additionally, the parties submitted supplemental briefing at my request. *See* ECF Nos. 366, 367. I held a hearing on August 20, 2015. *See* Loc. R. 105.6.

3. Because the parties' briefings and the Reports and Recommendations confine their dis-

I. SUMMARY JUDGMENT STANDARD

Summary judgment is proper when the moving party demonstrates, through "particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations ... admissions, interrogatory answers, or other materials," that "there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R.Civ.P. 56(a), (c)(1)(A); *see Baldwin v. City of Greensboro,* 714 F.3d 828, 833 (4th Cir.2013). If the party seeking summary judgment demonstrates that there is no evidence to support the nonmoving party's case, the burden shifts to the nonmoving party to identify evidence that shows that a genuine dispute exists as to material facts. *See Celotex v. Catrett,* 477 U.S. 317, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986). A "genuine" dispute of material fact is one where the conflicting evidence creates "fair doubt"; wholly speculative assertions do not create "fair doubt." *Cox v. Cnty. of Prince William,* 249 F.3d 295, 299 (4th Cir.2001); *see also Miskin v. Baxter Healthcare Corp.,* 107 F.Supp.2d 669, 671 (D.Md.1999). And, the existence of only a "scintilla of evidence" will not defeat a motion for summary judgment. *Anderson v. Liberty Lobby, Inc.,* 477 U.S. 242, 251–52, 106 S.Ct. 2505, 91 L.Ed.2d 202 (1986). Instead, the evidentiary materials submitted must show facts from which the finder of fact reasonably could find for the party opposing summary judgment. *Id.*

II. PATENT ELIGIBILITY

[redacted] "[F]our independent categories of inventions or discoveries ... are eligible for protection [under the Patent Act, 35 U.S.C. § 101]: processes, machines, manufactures, and compositions of matter." *Bilski v. Kappos,* 561 U.S. 593, 601, 130 S.Ct. 3218, 177 L.Ed.2d 792 (2010). Patent laws are to be " 'given wide scope' " to "ensure that ' "ingenuity should receive a liberal encouragement." ' " *Id.* (quoting *Diamond v. Chakrabarty,* 447 U.S. 303, 308–09, 100 S.Ct. 2204, 65 L.Ed.2d 144 (1980) (quoting 5 Writing of Thomas Jefferson 75–76 (H. Washington ed. 1871))). Nonetheless, "[l]aws of nature, natural phenomena, and abstract ideas are not patentable" because they

> are the basic tools of scientific and technological work. [M]onopolization of those tools through the grant of a patent might tend to impede innovation more than it would tend to promote it, thereby thwarting the primary object of the patent laws We have repeatedly emphasized this ... concern 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, 189 L.Ed.2d 296 (2014) (quotation marks and citations to *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.,* 569 U.S. ——, ——, 133 S.Ct. 2107, 2116, 186 L.Ed.2d 124 (2013), and *Mayo Collaborative Servs. v. Prometheus Labs., Inc.,* —— U.S. ——, ——, ——, 132 S.Ct. 1289, 1293, 1301, 182 L.Ed.2d 321 (2012), omitted).

cussions to validity under § 101, I do not reach the issues of whether the patents are novel under § 102, nonobvious under § 103, or fully and particularly described under § 112. *See Bilski v. Kappos,* 561 U.S. 593, 130 S.Ct. 3218, 177 L.Ed.2d 792 (2010) ("The § 101 patent-eligibility inquiry is only a threshold test. Even if an invention qualifies as a process, machine, manufacture or composition of matter, in order to receive the Patent Act's protection the claimed invention must also satisfy 'the conditions and requirements of [the Patent Act]' " set forth in §§ 102, 103, and 112. (quoting 35 U.S.C. § 101)).

"[D]etermining whether the section 101 exception for abstract ideas applies involves distinguishing between patents that claim the building blocks of human ingenuity—and therefore risk broad pre-emption of basic ideas—and patents that integrate those building blocks into something more, enough to transform them into specific patent-eligible inventions." *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1332 (Fed.Cir.2015).

Alice and *Mayo* provide the two-step framework for analyzing patent eligibility. *See Alice*, 134 S.Ct. at 2355; *Mayo*, 132 S.Ct. at 1294–97. In a nutshell, at the first step, the court "determine[s] whether the claims at issue are directed to one of [the] patent-ineligible concepts." *Alice*, 134 S.Ct. at 2355; *see Intellectual Ventures I*, 792 F.3d at 1366. The relevant patent-ineligible concept here is abstract ideas, a " 'category [that] embodies "the longstanding rule" that "[a]n idea of itself is not patentable." ' " *Intellectual Ventures I*, 792 F.3d at 1366 (quoting *Alice*, 134 S.Ct. at 2355 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67, 93 S.Ct. 253, 34 L.Ed.2d 273 (1972))). At the second step, the court examines the abstract idea identified at step one to assess whether the elements of the claims, individually and as a whole, transform the nature of the idea into a "patent eligible application" through the addition of an "inventive concept." *Alice*, 134 S.Ct. at 2355.

A. Step One Analysis

In *Alice*, 134 S.Ct. at 2357, the Court did not "delimit the precise contours of the 'abstract idea' category." But, the Federal Circuit has stated that, "[a]pplying the guidance of *Bilski*, *Mayo*, and *Alice*," it "ascertain[s] the basic character of the subject matter" at step one to determine whether there is an abstract idea. *Internet Patents Corp.*, 790 F.3d 1343, 1348 (Fed.Cir.2015); *see Ultramercial*, 772 F.3d at 714 (considering "the abstract idea at the heart of" the patent at issue); *Accenture*, 728 F.3d at 1344 (same). Additionally, "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 I*, 792 F.3d at 1369 (quoting *Alice*, 134 S.Ct. at 2356). In *Diamond v. Diehr*, 450 U.S. 175, 187, 101 S.Ct. 1048, 67 L.Ed.2d 155 (1981), for example, the Court concluded that the claims were not overly broad because the patentees did not seek "to preempt the use of [the well-known mathematical] equation" that their invention employed, but rather sought "only to foreclose from others the use of that equation in conjunction with all of the other steps in their claimed process." To make this determination, courts analogize to prior patent cases. *See, e.g., Alice*, 134 S.Ct. at 2356 ("It follows from our prior cases, and *Bilski* in particular, that the claims at issue here are directed to an abstract idea."); *Versata*, 793 F.3d at 1332 (noting that "[i]n recent years the Supreme Court and [the Federal Circuit] have examined claims directed to abstract ideas on a number of occasions," and that "[e]xtensive discussion of these cases appears in many opinions," and discussing "a few salient points as a means of comparison to the invention and claims" before it); *Intellectual Ventures I*, 792 F.3d at 1367 (noting that "[t]he abstract idea" before it was "not meaningfully different from the ideas found to be abstract in other cases before the Supreme Court and [the Federal Circuit] involving methods of organizing human activity").

The Supreme Court has cautioned that, "at some level, 'all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas,' " and too wide an application of the exception could "swallow all of patent law." *Alice*, 134 S.Ct. at 2354 (citing

Mayo, 132 S.Ct. at 1293). Nonetheless, post-*Alice*, when analyzing inventions involving the use of computers or similar devices programmed to perform well-established activities in a faster or more efficient manner, the Federal Circuit consistently has found that the claims are directed to abstract ideas and has continued to step two.[4] For example, in *Versata*, 793 F.3d at 1332–34, the court concluded that the claims at issue were "directed to the abstract idea of determining a price, using organizational and product group hierarchies, in the same way that the claims in *Alice* were directed to the abstract idea of intermediated settlement, and the claims in *Bilski* were directed to the abstract idea of risk hedging." Likewise, in *Intellectual Ventures I*, 792 F.3d at 1367, 1369–70, the court found that one patent at issue was "directed to an abstract idea: tracking financial transactions to determine whether they exceed a pre-set spending limit" and the second patent "generally relate[d] to customizing web page content as a function of [1] navigation history and [2] information known about the user," two "abstract, overly broad concept[s] long-practiced in our society." Similarly, in *Internet Patents Corp.*, 790 F.3d at 1348, the court concluded that "the character of the claimed invention is an abstract idea: the idea of retaining information in the navigation of online forms." Additionally, in *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed.Cir.2015), the court concluded that the claims were directed to the "abstract idea of offer-based price optimization," and in *Ultramercial*, it found that the patent at issue was directed at "the abstract idea ... 'that one can use [an] advertisement as an exchange or currency,' " 772 F.3d at 714 (citation to district court omitted); *see also DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed.Cir.2014) (stating that "identifying the precise nature of the abstract idea [was] not as straightforward as in *Alice* or some of [the] other recent abstract idea cases," noting four possible "characterizations of the abstract idea," and continuing to step two); *Accenture*, 728 F.3d at 1344 (pre-*Alice*, concluding that the patent at issue was directed at the abstract idea of " 'generating tasks [based on] rules ... to be completed upon the occurrence of an event,' " an idea that was "not as broad as the ... abstract idea of organizing data" that the district court identified, but that was "nonetheless an abstract concept"). Further, the majority of the widely-cited Supreme Court cases have held that the underlying idea was abstract. *Compare Alice*, 134 S.Ct. at 2355 (concluding that claims were "drawn to the abstract idea of intermediated settlement"); *Parker v. Flook*, 437 U.S. 584, 585–86, 98 S.Ct. 2522, 57 L.Ed.2d 451 (1978) (concluding that mathematical formula at core of invention was an abstract idea); *Gottschalk v. Benson*, 409 U.S. 63, 68, 93 S.Ct. 253, 34 L.Ed.2d 273 (1972) (concluding that claims based in algorithm were directed at abstract idea), *with Diamond v. Diehr*, 450 U.S. 175, 187, 101 S.Ct. 1048, 67 L.Ed.2d 155 (1981) (concluding that, while the process in the claims before the Court "employ[ed] a well-known mathematical equation," the claims were directed only at "the use of that equation in conjunction with all of the other steps in their claimed process").

[redacted] When applying the *Alice/Mayo* two-step analysis, it is appropriate to consider the specification of the patent to understand the nature of the claimed in-

4. Neither the Intellectual Ventures companies' extensive briefing and oral argument nor my independent research identified any post-*Alice* cases in which the Federal Circuit concluded that the patent at issue was not directed at an abstract idea.

vention. Nevertheless, to determine patent eligibility under § 101, "the important inquiry for a § 101 analysis is to look to the claim," *Accenture Global Services, GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed.Cir.2013), as it is the claims that have a preclusive effect, *see Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1334 (Fed.Cir.2012); *see also Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 336 U.S. 271, 277, 69 S.Ct. 535, 93 L.Ed. 672 (1949) (holding that the claim's "text must be sufficient to 'particularly point out and distinctly claim' an identifiable invention or discovery," because "it is the claim which measures the grant to the patentee"). Thus, the specification, regardless how detailed it is, cannot "transform a claim reciting only an abstract concept into a patent-eligible system or method." *Accenture*, 728 F.3d at 1345. For example, in *Accenture*, the Federal Circuit affirmed the district court's granting summary judgment of invalidity under § 101, reasoning that, "[a]lthough the specification of the ... patent [at issue] contain[ed] very detailed software implementation guidelines, the system claims themselves only contain generalized software components arranged to implement an abstract concept on a computer." *Id.*

B. Step Two Analysis

If the inquiry at step one determines that the patents' claims are directed at an abstract idea, the court, at step two,

> ask[s] whether the remaining elements, either in isolation or combination with the non-patent-ineligible elements, are sufficient to " 'transform the nature of the claim' into a patent-eligible application." *Alice*, 134 S.Ct. at 2358 (quoting [*Mayo*, 132 S.Ct. at 1297]). Put another way, there must be an "inventive concept" to take the claim into the realm of patent-eligibility. *Id.* at 2355. A simple instruction to apply an abstract idea on a computer is not enough. *Alice*, 134 S.Ct. at 2358 ("[M]ere recitation of a generic computer cannot transform a patent-ineligible idea into a patent-eligible invention. Stating an abstract idea 'while adding the words "apply it" is not enough for patent eligibility.' " (quoting *Mayo*, 132 S.Ct. at 1294)).
>
> Nor, in addressing the second step of *Alice*, does claiming the improved speed or efficiency inherent with applying the abstract idea on a computer provide a sufficient inventive concept. *See Bancorp Servs., LLC v. Sun Life Assurance Co. of Can.*, 687 F.3d 1266, 1278 (Fed. Cir.2012) ("[T]he fact that the required calculations could be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter."); *CLS Bank, Int'l v. Alice Corp.*, 717 F.3d 1269, 1286 (Fed.Cir.2013) (en banc) *aff'd*, —— U.S. ——, 134 S.Ct. 2347, 189 L.Ed.2d 296 (2014) ("[S]imply appending generic computer functionality to lend speed or efficiency to the performance of an otherwise abstract concept does not meaningfully limit claim scope for purposes of patent eligibility." (citations omitted)).

Intellectual Ventures I, 792 F.3d at 1367. Notably,

> [a]n abstract idea does not become non-abstract by limiting the invention to a particular field of use or technological environment, such as the Internet. *See Alice*, 134 S.Ct. at 2358 (limiting an abstract idea to a particular technological environment, such as a computer, does not confer patent eligibility); *Bilski v. Kappos*, 561 U.S. 593, 612, 130 S.Ct. 3218, 177 L.Ed.2d 792 (2010) ("[L]imiting an abstract idea to one field of use ... d[oes] not make the concept patentable.").

Intellectual Ventures I, 792 F.3d at 1366.

When searching for the necessary inventive concept at step two that transforms an

abstract idea into a patent-eligible invention, courts repeatedly have emphasized the importance of the requirement that the claims of the patent—which have preemptive impact if the patent is valid—must do more than simply explain *what* the invention does, in functional terms; they must explain *how* it does so. *Dealertrack v. Huber*, 674 F.3d 1315, 1334 (Fed.Cir.2012) ("In considering patent eligibility under § 101, one must focus on the claims. This is because a claim may 'preempt' only that which the claims encompass, not what is disclosed but left unclaimed."). For example, in *Mayo*, Justice Breyer, citing *Flook*, 437 U.S. 584, 98 S.Ct. 2522, where the patent was not valid, explained why the patent in that case was not patent eligible by contrasting it with *Diehr*, 450 U.S. 175, 101 S.Ct. 1048, where the patent was, stating that, "[u]nlike the process in *Diehr*, [the patent in *Flook*] did not 'explain how the variables used in the formula were to be selected, nor did the [claim] contain any disclosure relating to chemical processes at work or the means of setting off an alarm or adjusting the alarm limit.'" *Mayo*, 132 S.Ct. at 1299 (quoting *Diehr*, 450 U.S. at 192 n. 14, 101 S.Ct. 1048); *see also Diehr*, 450 U.S. at 192 n. 14 ("We were careful to note in *Flook* that the patent application did not purport to explain how the variables in the formula were to be selected, nor did the application contain any disclosure relating to the chemical processes at work or the means of setting off an alarm or adjusting the alarm unit."); *Flook*, 437 U.S. at 586, 98 S.Ct. 2522 ("The patent application does not purport to explain how to select the appropriate margin of safety, the weighting factor, or any of the other variables."); *Dealertrack*, 674 F.3d at 1333 ("[The] Patent 'does not specify how the computer hardware and database are specially programmed to perform the steps claimed in the patent.'" (citation omitted)); *DDR Holdings*, 773 F.3d at 1258 ("Unlike the claims in *Ultramercial*, the claims at issue here specify how interactions with the Internet are manipulated to yield a desired result...."); *E. Coast Sheet Metal Fabricating Corp. v. Autodesk, Inc.*, No. 12–517–LM, 2015 WL 226084, at *9 (D.N.H. Jan. 15, 2015) ("Without a disclosure of how the invention does what it does, neither the specification nor the claim identifies an inventive concept.").

The Federal Circuit's recent affirmance of summary judgment of patent ineligibility in *Intellectual Ventures I*, 792 F.3d 1363, another dispute between the parties before me, guides my application of the two-step framework. There, the court reasoned that, at step one, one patent "generally relate[d] to budgeting," with its claims "directed to an abstract idea: tracking financial transactions to determine whether they exceed a pre-set spending limit," albeit in "a 'communication medium' (broadly including the Internet and telephone networks)," a "limitation [that did] not render the claims any less abstract." *Id.* at 1367. The Federal Circuit observed, at step two, that "a database, a user profile ... and a communication medium, are all generic computer elements" that do not provide an inventive concept. *Id.* at 1368. As for the second patent, it found at step one that it "generally relate[d] to customizing web page content as a function of [1] navigation history and [2] information known about the user," *id.* at 1369, two "abstract, overly broad concept[s] long-practiced in our society," *id.* at 1370.

Relevantly, the second patent claimed an "interactive interface" that tailored information on a website based on the user, which Intellectual Ventures argued was "a specific application of the abstract idea that provide[d] an inventive concept." *Id.* The appellate court rejected that notion, reasoning at step two:

> [N]owhere does Intellectual Ventures assert that it invented an interactive interface that manages web site content. Rather, the interactive interface limitation is a generic computer element. At Intellectual Ventures' urging, "interactive interface" 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 describes the "interactive interface" as "tasked with tailoring information and providing it to the user." Elsewhere, Intellectual Ventures equates the "interactive interface" with the "web page manager," which "tailors the web page to the specific individual based on the profile." At oral argument, Intellectual Ventures described the interactive interface as "software" and agreed that it "is basically the brains of the outfit." Nowhere in these vague and generic descriptions of the "interactive interface" does Intellectual Ventures suggest an "inventive concept." *Alice*, 134 S.Ct. at 2355. Rather, the "interactive interface" simply describes a generic web server with attendant software,[5] tasked with providing web pages to and communicating with the user's computer.

Id.

III. THE '081 PATENT

The '081 Patent pertains generally to manipulating data in business documents. Claim 21, which the parties agree is representative, states:

> 21. An apparatus for manipulating XML [6] documents, comprising:
>
> a processor;
>
> a component that organizes data components of one or more XML documents into data objects;
>
> a component that identifies a plurality of primary record types for the XML documents;
>
> a component that maps the data components of each data object to one of the plurality of primary record types;
>
> a component that organizes the instances of the plurality of primary record types into a hierarchy to form a management record type;
>
> a component that defines a dynamic document for display of an instance of a management record type through a user interface; and
>
> a component that detects modification of the data in the dynamic document via the user interface, and in response thereto modifies a data component in an XML document.

A. Step One: Whether the Claims are Directed to an Abstract Idea

The claimed invention "allows the user to view and update XML documents in different formats, and allows the user to *manipulate the data* and perform actions without programming skills," '081 Patent, col. 1, lines 46–48 (emphasis added). The representative claim (21) states that the invention is "[a]n apparatus for manipulating XML documents" through components

5. Although some litigants and commentators have argued for software protection under patent law, to the exclusion of copyright law, while others have argued for software protection under copyright law, to the exclusion of patent law, neither the Supreme Court, the Federal Circuit, nor Congress has decided the issue, such that software may be both patentable and copyrightable. *See Oracle Am., Inc. v. Google, Inc.*, 750 F.3d 1339, 1379–81 (Fed. Cir.2014) (noting arguments from both camps and lack of authority on the issue; respecting "the Ninth Circuit's decision to afford software programs protection under the copyright laws" and declining "to declare that protection of software programs should be the domain of patent law, and only patent law").

6. XML stands for "Extensible Markup Language." '081 Patent, col. 1, lines 21–22.

that "organize[ ]," "identif[y]," "map[ ]," "define[ ]," "detect[ ] modification of," and "modif[y]" "data." *Id.* at col. 20, lines 43–61. Claims 23 and 24 claim "[t]he apparatus of claim 21, wherein the management record type defines business objects" and "the business objects comprise invoices, bills of material, purchase orders, price books, forecasts [and] fund transactions." *Id.* at col. 21, lines 1–6. Based on these claims, the patent is, at its core, directed to the abstract idea of organizing, displaying, and manipulating data related to business documents. This concept addresses a fundamental activity in which businesses have engaged as long as businesses have relied on documents.

> As the Capital One companies asserted, [I]t is the same idea when a bank retrieves information from banking documents (checks and deposits), extracts relevant information from those documents, stores the information, and reformats the information into a new document such as a monthly statement. *See Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1347 (Fed.Cir.2014) ("banks have, for some time, reviewed checks, recognized relevant data such as the amount, account number, and identity of account holder, and stored that information in their records" for later use). In addition, military officers have long received intelligence reports, extracted key information, reorganized that information into intelligence summaries, and sent the summaries back to the field officers. Accountants have long received multiple documents regarding business transactions, extracted key information, and used that information to prepare periodic balance sheets or other summaries for business owners. As all of these analogies show, the abstract idea at the heart of the '081 patent was "long prevalent" and has been used in a wide variety of contexts.

Defs.' Supp. Br. 4, ECF No. 367. Notably, in *Content Extraction*, 776 F.3d at 1347, the court found that the claims were "drawn to the abstract idea of 1) collecting data, 2) recognizing certain data within the collected data set, and 3) storing that recognized data in a memory," and stated that "[t]he concept of data collection, recognition, and storage is undisputedly well-known. Indeed, humans have always performed these functions." Additionally, in *Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 Fed.Appx. 988, 992 (Fed. Cir.2014), the Federal Circuit held that "the idea of collecting information in classified form, then separating and transmitting that information according to its classification, is an abstract idea that is not patent-eligible," and in *Versata*, 793 F.3d at 1332–34, where the claims used organizational hierarchies, as does Claim 21, for a business purpose (price determination), the Federal Circuit again concluded that they were directed at an abstract idea. *See also HealthTrio, LLC v. Aetna, Inc.*, No. 12–3229, 2015 WL 4005985, at *3 (D.Colo. June 17, 2015) (finding that "the underlying purpose of the patent claims," which pertained to "combining and organizing records from various sources," was an abstract idea). Indeed, the Intellectual Ventures companies acknowledge that data manipulation, which "is used as part of a process to manipulate incompatible XML pages for a non-programmer," is an "abstraction[ ]." Pls.' Opp'n & Cross–Mot. Mem 3, 24. Such a "building block[ ] of human ingenuity" is too broad to prevent "pre-emption of basic ideas." *See Versata*, 793 F.3d at 1331–32; *see also Hewlett Packard Co. v. ServiceNow, Inc.*, No. 14–570–BLF, 2015 WL 1133244, at *7 (N.D.Cal. Mar. 10, 2015) ("Claiming the abstract idea of organizing information into a hierarchy would preempt any other inventor from creating a computer-based method for categorizing and organizing in-

formation by classification, no matter how the inventor achieved this result.").

Undeterred, the Intellectual Ventures companies insist that data manipulation "is not the whole of the invention." Pls.' Opp'n & Cross–Mot. Mem. at 24. Specifically, they contend that the claims are not abstract because they recite a "user interface," a "dynamic document" and "XML documents." *Id.* at 19–20. Yet, the "limitation [to XML documents] does not render the claims any less abstract," as "[a]n abstract idea does not become nonabstract by limiting the invention to a particular field of use or technological environment." *Intellectual Ventures I*, 792 F.3d at 1366–67; *see Alice*, 134 S.Ct. at 2358. "Dynamic document" is not defined. "Dynamic" means "[o]f or pertaining to force producing motion: often opposed to static." *See* Dynamic, Oxford English Dictionary, http://www.oed.com.[7] Thus, Plaintiffs do not suggest that "dynamic document" refers to anything other than a document that is changed repeatedly, or continuously capable of being changed. Document modification, whether electronically or by editing with pen and paper, is also a fundamental business activity and too broad to be a non-abstract patentable idea. *See Alice*, 134 S.Ct. at 2356; *Intellectual Ventures I*, 792 F.3d at 1369.

Whether the recitation of a user interface makes the invention patent-eligible is a question properly reserved for step two of this analysis, as courts regularly have concluded that the basic character of a claim reciting an interface for accessing user data was an abstract idea. *See, e.g., Intellectual Ventures I*, 792 F.3d at 1369–70 (claim reciting user interface directed at abstract idea of "customizing information based on (1) information known about the user and (2) navigation data"); *Clear with Computers, LLC v. Altec Indus., Inc.* ("*Altec*"), Nos. 14–79, 14–89, 2015 WL 993392, at *4 (E.D.Tex. Mar. 3, 2015) (claims employing a "user interface" nonetheless were abstract in that they "essentially propose[d] that, instead of a human salesman asking customers about their preferences and then creating a brochure from a binder of product pictures and text and using a rolodex to store customer information, a generic computer can perform those functions"); *MyMedicalRecords v. Walgreen Co.*, Nos. 13–631, 13–2538, 13–7285, 13–3560, 2014 WL 7339201, at *2 (C.D.Cal. Dec. 23, 2014) (claims that recited computer components, including a user interface, that the patent hold did not claim to have invented, were insufficient to render abstract idea patent-eligible); *CertusView Techs., LLC v. S & N Locating Servs., LLC*, 111 F.Supp.3d 688, 709, 2015 WL 269427, at *17 (E.D.Va. Jan. 21, 2015) (claim reciting "generic computer components" including a "communication interface" was directed at "the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting locate operations"); *DietGoal Innovations LLC v. Bravo Media LLC*, 33 F.Supp.3d 271, 288–89 (S.D.N.Y.2014) (recitation of a system involving a user interface and other generic computer components did not render any less abstract claims directed at abstract idea of meal planning); *Clear with Computers, LLC v. Dick's Sporting Goods, Inc.* ("*Dick's Sporting Goods*"), 21 F.Supp.3d 758, 767–68 (E.D.Tex.2014) (claim reciting "the additional limitation of 'user interface for the computer system'" provided "a token and conventional, post-

7. The online edition of the Oxford English Dictionary appears at the top of Justice Scalia and Bryan Garner's list of "the most useful and authoritative for the English language generally." Antonin Scalia & Bryan A. Garner, *Reading Law: The Interpretation of Legal Texts* 419, 423 (2012).

solution limitation that is insufficient to render the [otherwise abstract] claim patent eligible").

Simply put, these recitations do not alter the abstract idea at the heart of the claims, namely organizing, displaying, and manipulating data related to business documents. Patenting this overly-broad idea on its own would foreclose others from using a fundamental concept underlying various business practices. *See Alice,* 134 S.Ct. at 2356; *Intellectual Ventures I,* 792 F.3d at 1369. Therefore, I must consider step two to determine whether there is an inventive concept to make this idea patent-eligible.

B. Step Two: Whether There is an Inventive Concept

The representative claim does not contain an inventive concept, despite its recitation of a "user interface," a "dynamic document," and "XML documents." The dynamic document is not an inventive concept, as any document can be changed. Nor are XML documents an inventive concept. Although the Intellectual Ventures companies argued that XML documents were not ubiquitous at the time of the patent, Aug. 20, 2015 Hr'g, they also stated that, at that time, "[t]here was a problem in the XML arts," *id.,* acknowledging by necessity that XML documents were well known enough to have their own field of art. Moreover, the patent states in its Background that "[c]ompanies use XML documents to publish various types of information for use by customers and partners," '081 Patent, col. 1, lines 28–29, showing commonplace business use. Further, as noted, limiting the idea to XML documents, " 'one field of use[,] ... d[oes] not make the concept patentable.' " *Intellectual Ventures I,* 792 F.3d at 1366–67 (quoting *Bilski v. Kappos,* 561 U.S. 593, 612, 130 S.Ct. 3218, 177 L.Ed.2d 792 (2010)); *see Alice,* 134 S.Ct. at 2358.

As for the user interface, unless the claims include a sufficient explanation of how it works, it is nothing more than a conventional, generic computer component that is described in functional terms relating *what* it does, but not *how* it does it. This cannot breathe concreteness into an abstract idea. *See Intellectual Ventures I,* 792 F.3d at 1370; *MyMedicalRecords,* 2014 WL 7339201, at *2–3; *Dick's Sporting Goods,* 21 F.Supp.3d at 768. According to the Intellectual Venture companies, "Claim 21 .... solves a new problem with a specific solution," that is, the user interface, which they insist is "a very specific invention." Pls.' Opp'n & Cross–Mot. Mem. 19, 23. Certainly, this need for an interface that streamlines data manipulations when working with incompatible XML documents appears to have existed at the time of the patent: The '081 Patent states that companies working with other companies' XML documents "may find them incompatible with their own XML formats, relational database schemes, and message formats and therefore difficult to work with," and "[i]n many cases, the user is forced to have [a] programmer create a program to merge, filter and transform XML documents into the format they want" so that the user can "manipulate the data and perform actions without programming skills." '081 Patent, col. 1, lines 37–48.

Yet, a patent cannot claim a "principle of the physical or social sciences by reciting a computer system configured to implement the relevant concept," as "[s]uch a result would make the determination of patent eligibility 'depend simply on the draftsman's art.' " *Alice,* 134 S.Ct. at 2359 (quoting *Flook,* 437 U.S. at 593, 98 S.Ct. 2522). Thus, there can be no inventive concept if the patent claim limitations do not give sufficient detail to show how the patent holder in fact solved the prob-

lem. *See id.* The claim must assert that the inventor developed the software, formula, or algorithm that in fact provides the solution and recite the limitations of how to do so in the claims. Otherwise the result is a draftsman's skill resulting in the preemption of an entire field. *See id.* Simply put, the claim must show "how" the apparatus works, because without the "how" limitation, a claim does no more than direct the application of an abstract idea on a computer. The question, therefore, is whether the claims sufficiently explain how the user interface works.

1. Cases considering this issue

In *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1258 (Fed.Cir.2014), the claims "specif[ied] how" the patent achieved its inventive concept, resulting in the only post-*Alice* Federal Circuit holding of patent validity of a computer/software related invention, and providing a benchmark of specificity to which other claims can be compared. There, the two patents at issue purported to "provide[ ] a solution to [a] problem" resulting when a third-party merchant advertised on " 'host' website." *Id.* at 1248. The patents' specifications noted that "prior art systems allowed third-party merchants to 'lure the [host website's] visitor traffic away' from the host website" and took them "to the third-party merchant's website when they clicked on the merchant's advertisement on the host site." *Id.* To solve this problem, the patents "creat[ed] a new web page that ... '[gave] the viewer of the page the impression that she [was] viewing pages served by the host' website." *Id.* at 1249. The patents were "directed to systems and methods of generating a composite web page that combines certain visual elements of a 'host' website with content of a third-party merchant," such as systems and methods to generate a web page that "combine[s] the logo, background color, and fonts of the host website with product information from the merchant." *Id.* at 1248.

At step one, the *DDR Holdings* Court noted that the asserted claims did "not recite a mathematical algorithm" or "a fundamental economic or longstanding commercial practice," and that while "the claims address[ed] a business challenge (retaining website visitors), it [was] a challenge particular to the Internet." 773 F.3d at 1257. The court observed that "identifying the precise nature of the abstract idea [was] not as straightforward as in *Alice* or some of [the] other recent abstract idea cases," and then addressed step two without defining the abstract idea, reasoning that "under any of [various] characterizations of the abstract idea, the ... patent's claims satisfy *Mayo/Alice* step two." *See id.* Implicit in its performing the step two analysis was the court's recognition that, at step one, the patent was directed to an abstract idea, regardless of the number of ways in which that abstract idea had been described in the briefing by the parties.

The court stated that "[d]istinguishing between claims that recite a patent-eligible invention and claims that add too little to a patent-ineligible abstract concept can be difficult, as the line separating the two is not always clear," *id.* at 1255–an accurate, but not particularly helpful observation when trying to divine exactly where that line is to be drawn in a particular case. It observed that the claims at issue differed from other computer-related claims that did not add enough to provide an inventive concept

> because they [did] not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet ... Instead, the claimed solution [was] necessarily rooted in computer technology in order to overcome a

> problem specifically arising in the realm of computer networks.

Id. at 1257. The *DDR Holdings* Court cautioned that "not all claims purporting to address Internet-centric challenges are eligible for patents," as they still may address abstract ideas and only offer " 'routine additional steps.' " *Id.* at 1258 (citing *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709 (Fed.Cir.2014), as an example). It reasoned that the claims before it differed from those in cases like *Ultramercial* because they *"specif[ied] 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," thereby "recit[ing] an invention that [was] not merely the routine or conventional use of the Internet." *Id.* at 1258–59 (emphases added). Additionally, the claims did "not attempt to preempt every application of the idea of increasing sales by making two web pages look the same, or of any other variant suggested by [the defendant]," but instead "recite[d] a *specific way* to automate the creation of a composite web page" with specific elements "to solve a problem faced by websites on the Internet." *Id.* at 1259 (emphasis added). The court concluded that the "claims include[d] 'additional features' that ensure[d] the claims [were] 'more than a drafting effort designed to monopolize the [abstract idea].' " *Id.* (quoting *Alice*, 134 S.Ct. at 2357). Distilled to its essence, the reason why the patent in *DDR Holdings* is the only post-*Alice* patent involving computer-based inventions to survive a challenge in the Federal Circuit or the Supreme Court for abstractness is because the patent contained sufficient detail to show how the claims solved the Internet-related problem at the heart of the patent, and that solution involved much more than programming a generic computer to interface with the Internet in the manner in which computers routinely did so. Rather, the invention described with detail how to actually change the way in which the Internet itself operated, and that was its inventive concept.

In *Dealertrack, Inc. v. Huber*, in contrast, the Federal Circuit found that the patent did " 'not specify *how* the computer hardware and database [were] specially programmed to perform the steps claimed in the patent,' " and "[t]he claims [were] silent as to *how* a computer aid[ed] the method, the extent to which a computer aid[ed] the method, or the significance of a computer to the performance of the method." 674 F.3d 1315, 1333 (Fed.Cir.2012) (citation to district court omitted) (emphasis added). On that basis, the court concluded that the claims were drawn to "patent ineligible abstract ideas" that did "not require a specific application," and they were not "tied to a particular machine." *Id.* at 1333–34.

Similarly, in *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, —— U.S. ——, ——–——, 132 S.Ct. 1289, 1298–99, 182 L.Ed.2d 321 (2012), the Supreme Court compared the patent before it to the precedents it had set in *Parker v. Flook*, 437 U.S. 584, 98 S.Ct. 2522, 57 L.Ed.2d 451 (1978), and *Diamond v. Diehr*, 450 U.S. 175, 101 S.Ct. 1048, 67 L.Ed.2d 155 (1981), to "reinforce[ ][its] conclusion" that the steps in the patent were "not sufficient to transform unpatentable natural correlations into patentable applications of those regularities" because they did not explain "how." In *Flook*, the Court had observed that, where a claim recites a process that contains a mathematical algorithm, "[t]he process itself, not merely the mathematical algorithm, must be new and useful." 437 U.S. at 591, 98 S.Ct. 2522. It concluded that the invention at issue was not patentable, *id.* at 596, 98 S.Ct. 2522, reasoning:

> The patent application does not purport to explain *how* to select the appro-

> priate margin of safety, the weighting factor, or any of the other variables. Nor does it purport to contain any disclosure relating to the chemical processes at work, the monitoring of process variables, or the means of setting off an alarm or adjusting an alarm system.

Id. at 586, 98 S.Ct. 2522 (emphasis added). In *Diehr*, 450 U.S. at 192, 101 S.Ct. 1048, the Court held:

> [W]hen a claim containing a mathematical formula implements or applies that formula in a structure or process which, when considered as a whole, is performing a function which the patent laws were designed to protect (e.g., transforming or reducing an article to a different state or thing), then the claim satisfies the requirements of § 101.

It concluded that the patent before it, one for curing rubber, was patentable, reasoning that it "incorporate[d] in it a more efficient solution of the equation" it employed, a solution explained though various steps "includ[ing] installing in a press, closing the mold, constantly determining the temperature of the mold, constantly recalculating the appropriate cure time through the use of the formula and a digital computer, and automatically opening the press at the proper time." *Id.* at 187–88, 192, 101 S.Ct. 1048. The *Diehr* Court distinguished *Flook*, observing that it was "careful to note in *Flook* that the patent application did not purport to explain *how* the variables used in the formula were to be selected." 450 U.S. at 192 n. 14, 101 S.Ct. 1048 (emphasis added).

The *Mayo* Court made the same observation, stating that, "[u]nlike the process in *Diehr*," the process in *Flook* "did not 'explain how the variables used in the formula were to be selected.'" 132 S.Ct. at 1299 (quoting *Diehr*, 450 U.S. at 192 n. 14, 101 S.Ct. 1048; citing *Flook*, 437 U.S. at 586, 98 S.Ct. 2522). Likewise, the claim before it instructed a specific audience to apply a law of nature in some way when administering a certain drug, without explaining how. *Id.* at 1299. The Court concluded that the steps of the patent at issue "add[ed] nothing specific to the laws of nature other than what is well-understood, routine, conventional activity, previously engaged in by those in the field," and consequently "present[ed] a case for patentability that [was] weaker than the (patent-eligible) claim in *Diehr* and no stronger than the (unpatentable) claim in *Flook*," as the process "in *Flook* was characterized in roughly this way," and that in *Diehr* was not. *Id.* at 1299–300.

East Coast Sheet Metal Fabricating Corp. v. Autodesk, Inc., No. 12–517–LM, 2015 WL 226084, at *9 (D.N.H. Jan. 15, 2015), involved a similarly-deficient invention. There, the patent

> recite[d] an apparatus composed of a computer-readable medium containing instructions that, when executed by a processor, perform the steps of: (1) obtaining visual representation of the components of a ventilation system; (2) assigning property values to those components; (3) utilizing geometrical information representing the visual representations and the property values; (4) mapping components of that geometrical information to standard fittings; and (5) generating a manufacturing blueprint.

The court concluded that it was not patentable because "that claim only says what the invention does," and "[w]ithout a disclosure of how the invention does what it does, neither the specification nor the claim identifies an inventive concept." *Id.* It reasoned that "the patent merely recites the use of a generic computer to perform generic computer operations, and that is not enough to establish an inventive concept." *Id.* The court distinguished *DDR Holdings*, noting that, unlike in

DDR Holdings, the patents before it "describe[d] the inventions' computer programming as operating in the most generic of terms," referring to "data being processed, transferred, and stored using computer memory and a processor," but without including any "language ... that describes the computer programming involved in the invention as operating in anything other than their 'normal, expected manner.'" *Id.* (quoting *DDR Holdings,* 773 F.3d at 1258).

Hewlett Packard Co. v. ServiceNow, Inc., No. 14–570–BLF, 2015 WL 1133244 (N.D.Cal. Mar. 10, 2015), in which the court analyzed four Hewlett Packard Co. ("HP") patents and determined that each was directed to an abstract idea that lacked an inventive concept to transform it into a patent-eligible application, also is informative in analyzing step two. The first HP patent was "directed toward optimizing the efficiency of providing IT helpdesk services." *Id.* at *1. The representative claim recited a "computer program product" that comprised *"instructions for"* (1) "inspecting a service ticket," (2) "displaying ... a graphical display," (3) "determining a[ ] deadline approaching alert time," and (4) "alerting the help desk user." *Id.* at *2 (emphasis added). HP's claim constructions, which the parties and the court adopted for summary judgment purposes, defined certain elements as being "specifically configured to." *Id.* at *6. The court observed:

> It is clear under Supreme Court precedent that simply reciting the phrase "instructions for" in front of the substantive functional limitations is insufficient to turn an otherwise ineligible abstract idea into a patent-eligible application. This is no different than simply adding the words "use a computer to" before reciting an abstract idea, which the Supreme Court has unanimously held to be insufficient. Claiming any and all "instructions for" implementing an abstract idea is substantively identical to instructing the practitioner to implement the abstract idea on a computer.
>
> ... Reciting generic computer components "configured to" implement an abstract idea is no different than adding "instructions for" in front of the abstract idea; in either case, any and all implementations of the abstract idea are being claimed, which is essentially equivalent to claiming the abstract idea itself.

Id. (citing *Alice,* 134 S.Ct. at 2359–60). Additionally, "the context of IT help desks" was a field-of-use limitation that did not make the abstract idea patent eligible. *Id.* And, although the patent recited a "deadline based upon a contractually determined severity of the problem and a corresponding contractually required time for resolution of the problem," *id.* at *2, the limitation itself was abstract and HP did not argue that the idea was "innovative or non-conventional," *id.* at *6.

The second patent was "directed toward accessing information in an information repository, such as a computer database," and it "claim[ed] a method and apparatus for accessing a repository's information in a way that it may be displayed to a user in hierarchical form." 2015 WL 1133244, at *2. The representative claim recited an "[a]pparatus" that comprised "a number of computer readable media" with "computer readable program code" that included "code for creating a hierarchy of derived containers," "code for displaying [those] containers," and "code for determining [which] containers ha[d] been selected ... and displaying [its] contents." *Id.* HP argued that the patent was "specific and concrete" because "its claims [were] limited to implementations that use 'derived containers' and 'container definition nodes.'" *Id.* at *7. The court considered HP's proposed construction of those terms

to determine whether they "really [were] specific, specialized data structures, rather than functionally defined generic computer components," but concluded that they were nothing more than " 'functional and generic' description[s] of 'generic computer components configured to implement the [abstract] idea' that the Supreme Court rejected in *Alice*." *Id.* at *7–8. The court reasoned that the claim constructions did not provide "a substantive limitation on *how* the abstract idea [was] implemented" and "sa[id] nothing of *how* the data structure [was] capable of performing these operations." *Id.* at *8 (first emphasis added; second emphasis in original). Because the patent simply claimed an "abstract idea [limited] to the context of computers," it was not patent eligible. *Id.* at *9.

The third and fourth patents were directed toward creating and running "automating workflows for resolving IT incidents." *Id.* at *3. The representative claim of the third patent, which was directed at creating "automating workflows for resolving IT incidents," recited "[a] computer implemented method for facilitating a user in defining a repair workflow" by "facilitating the user in defining" (1) "steps of the repair workflow," (2) "operations for the steps," (3) "inputs and outputs of the operations," and (4) "transitions between the steps"; and "checking the defined repair workflow" by "verifying that each response of each step's operation has a transition to another step." *Id.* The court concluded that there was no inventive concept because the step of checking the workflow to make sure it worked was "the only limitation that [was] not a recitation of the idea of automating IT incident resolution," and that limitation did "not *specify how* the verification of the workflow's correctness is to be achieved; it merely instructs that the workflow be verified." *Id.* at *10 (emphasis added). Noting that HP gave it "no reason to suspect that this involves anything other than the routine application of conventional computing concepts," the court concluded that the limitation could not "supply the necessary 'inventive concept' to direct the claim to patent-eligible subject matter." *Id.*

The representative claim of the fourth patent, which was directed at running the repair workflow created in the third patent, recited "[a] computer implemented method" that comprised "loading [the] repair workflow," creating a repair frame" for it, "creating a repair context for the repair frame . . . and populating the repair frame with configuration data"; "binding" and "processing . . . data values," "executing the step's operation, "extracting the one or more outputs of step within the context" and "selecting a transition to transition to another step." 2015 WL 1133244, at *3. The court concluded that it was not patent-eligible because "there [were] no additional limitations beyond reciting the execution of an automated workflow to resolve IT incidents," which did not include an inventive concept. *Id.* at *10. It observed, with regard to its conclusion of patent invalidity on the third and fourth patents, *id.* at *11:

> This conclusion is buttressed by concerns of preemption. Granting HP a monopoly on a very specific implementation of computer-automated resolution of IT incidents would spur innovation, by creating an incentive for others to develop a different implementation in order to avoid HP's patent. But the claims in the [third and fourth] patents would have the opposite effect. They are framed in such broad, functional language as to cover any conceivable computer-automated system for resolving IT incidents. By broadly preempting any computer-automated system for the resolution of IT incidents, these patent claims would inhibit innovation, because there is no incentive to develop new

systems of computer-automated resolution of IT incidents—any new system that gets developed would incur not only the cost of development, but also the cost of licensing HP's invention.

2. Application to the '081 Patent

In *Mayo,* Justice Breyer observed that "the claim simply tells doctors to: ... measure (*somehow*) the current level of the relevant metabolite" and apply "(unpatentable) laws of nature," such that "the effect [was] simply to tell doctors to apply the law *somehow* when treating their patients." 132 S.Ct. at 1299–300 (emphasis added). Borrowing this approach and focusing on the claims themselves—as I must, given their potential preemptive effect—, the components of Claim 21 "organize[ ] [*somehow*] data components of one or more XML documents into data objects," "identif[y] [*somehow*] a plurality of primary record types for the XML documents," "map[ ] [*somehow*] the data components of each data object to one of the plurality of primary record types"; "organize[ ] [*somehow*] the instances of the plurality of primary record types into a hierarchy to form a management record type," "define[ ] [*somehow*] a dynamic document for display of an instance of a management record type," "detect[ ] modification [*somehow*] of the data in the dynamic document," and "in response thereto, modif[y] a data component in an XML document." '081 Patent, col. 20, lines 46–61. The most explanation of *how* that the claim provides is that "display" is accomplished "through a user interface," and modification is detected "via the user interface." *See id.* The representative claim provides only a functional description of what the user interface does, without including steps like those in *Diehr,* 450 U.S. at 187, 101 S.Ct. 1048, to explain *how* it works. Rather, like those in *Mayo,* 132 S.Ct. at 1299, and *Flook,* 437 U.S. at 586, 98 S.Ct. 2522, the representative claim does "not purport to explain *how*" to accomplish the abstract idea. Specifically, like that in *Dealertrack,* the patent does " 'not specify *how* the computer hardware' "—here, the processor and the user interface—are " 'specially programmed to perform the steps claimed in the patent.' " *See Dealertrack,* 674 F.3d at 1333 (citation omitted).

Without the "how," the user interface is nothing more than a "generic computer element" like the database, user profile, "communication medium," and "interactive interface" in *Intellectual Ventures I,* 792 F.3d at 1368, 1370. Thus, the '081 Patent is unlike the patent in *DDR Holdings* because its representative claim does not have " 'additional features' " that "specify how" it works. *See DDR Holdings,* 773 F.3d at 1258–59. Moreover, whereas the invention in *DDR Holdings* actually changed the way the Internet worked by "overrid[ing] the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink," to send a website visitor to a "hybrid web page" instead of a third-party website, *id.,* the '081 Patent does not change the way XML documents or the computer ordinarily operate. It simply employs a computer in the way that it always is used but eliminates the programmer's role. Consequently, the nonspecific claim recitations, like the patent-ineligible one in *East Coast Sheet Metal,* rely on only generic terms and do not show that the generic computer components would function in anything other than "their 'normal, expected manner.' " 2015 WL 226084, at *9 (quoting *DDR Holdings,* 773 F.3d at 1258). Further, the Federal Circuit appeared to limit *DDR Holdings* to an Internet context, stating in *Intellectual Ventures I* that "*DDR* ha[d] no applicability" because "[t]he patent at issue in [*DDR Holdings*] dealt with a problem unique to the Internet," and in *Intellectual Ventures I,* "[t]he patent claims [did] not address problems unique

to the Internet." 792 F.3d at 1371. The '081 Patent is not restricted to Internet application, but rather broadly addresses XML document manipulation, such that *DDR Holdings* is of questionable support for Intellectual Ventures. *See Intellectual Ventures I,* 792 F.3d at 1371.

The claim recitations in the '081 Patent are markedly similar to those before the court in *Hewlett Packard Co.,* 2015 WL 1133244. Reciting "components," that is, software programs, that accomplish each step and claiming that that "display" is accomplished "through a user interface" and modification is detected "via the user interface" is akin to "[r]eciting generic computer components 'configured to' implement an abstract idea," or "adding 'instructions for' in front of the abstract idea." *Id.* at *6. As the court said in HP, "in either case, any and all implementations of the abstract idea are being claimed, which is essentially equivalent to claiming the abstract idea itself." *Id.* Thus, the user interface is not an inventive concept. Indeed, as in *Intellectual Ventures I,* 792 F.3d at 1370, the claims in the t'081 Patent do not provide the details to show that Intellectual Ventures actually "invented [a user] interface" that enables a nonprogrammer to manipulate data in incompatible XML documents or explain how the interface works. Therefore, the claims do not meaningfully "restrict[ ] how the result is accomplished"; rather, they "describe[ ] the effect or result dissociated from any method by which [the underlying idea] is accomplished." *See Internet Patents Corp. v. Active Network, Inc.,* 790 F.3d 1343, 1348 (Fed.Cir.2015). As a result, they remain an abstract concept the patenting of which would "foreclose other ways of solving the problem." *Intellectual Ventures I,* 792 F.3d at 1371 (discussing *DDR Holdings,* 773 F.3d at 1256–59). Without enough information on how the user interface works, all similar inventions are preempted and innovation is inhibited, as no one has the opportunity to consider the process and invent a different, better way of doing it. *See Hewlett Packard Co.,* 2015 WL 1133244, at *11.

Further, the discussion of the second HP patent in *Hewlett Packard Co.,* 2015 WL 1133244, is particularly apt. That patent claimed an apparatus that employed program code, that is, software, to sort and display information. *Id.* at *2. This description roughly describes the '081 Patent also. And, just as HP argued that its claim terms added specificity to prevent overbreadth, *id.* at *7, the Intellectual Ventures companies argue that there is an inventive concept in its "user interface," "primary record types" and "management record types." A "primary record type" is "a data type that defines a data structure to contain data extracted from XML documents," and a "management record type" is "a data type that defines a collection of primary record types," Jt. Claim Constr. Chart for '081 Patent 1–2, Jt. Claim Constr. Stmt. Ex. C, ECF No. 202–3. "User interface" is not defined on the Joint Claim Construction Chart or in Plaintiffs' Claim Construction Opening Brief, ECF No. 213, which Defendants and this Court adopt for summary judgment purposes. As in *Hewlett Packard Co.,* these claim constructions do not provide "a substantive limitation on *how* the abstract idea is implemented" and "say[ ] nothing of *how* the [components are] capable of performing these operations." *See* 2015 WL 1133244, at *8 (first emphasis added; second emphasis in original). Thus, they are nothing more than " 'functional and generic' description[s] of 'generic computer components configured to implement the [abstract] idea' that the Supreme Court rejected in *Alice.*" *See id.* at *7–8.

Simply put, the claimed invention identifies the need but not the solution. When working with multiple digital documents, a

non-programmer user can be stymied by incompatible documents that cannot be merged or altered without the proper program. A user interface that enabled a non-programmer to make changes and merge content from incompatible digital documents could be useful, but the claims do not describe how that interface works sufficiently, if at all. The result is an " 'incidental use of a computer to perform the [claimed process, which] does not impose a sufficiently meaningful limitation on the claim's scope.' " *Intellectual Ventures I,* 792 F.3d at 1368 (quoting *CyberSource Corp. v. Retail Decisions, Inc.,* 654 F.3d 1366, 1375 (Fed.Cir.2011)). The Intellectual Ventures companies concede that a programmer can "create a program to merge, filter and transform XML documents into the format they want" so that the user can "manipulate the data and perform actions without programming skills." '081 Patent, col. 1, lines 37–48. Thus, the outcome already can be achieved, and the claims do nothing more than propose using a computer to achieve the same result. Put another way, they state that the data manipulation is "computer-aided" without explaining "how a computer aids the method." *See Dealertrack,* 674 F.3d at 1333. These claims "add too little to [the] patent-ineligible abstract concept" of organizing, displaying, and manipulating data related to business documents, *see DDR Holdings,* 773 F.3d at 1258–59, as they simply state that it should be achieved through the recited "generic computer elements performing generic computer tasks." *See Intellectual Ventures I,* 792 F.3d at 1368; *see Alice,* 134 S.Ct. at 2359–60. This does not transform the abstract idea into a patent-worthy inventive concept.

[redacted] To the extent that the claimed invention streamlines the XML document translation process by creating a user interface that includes a dynamic document and replaces the programmer, it is relevant that "claiming the improved speed or efficiency inherent with applying the abstract idea on a computer" does not "provide a sufficient inventive concept." *Intellectual Ventures I,* 792 F.3d at 1367. Thus, the user interface "does not meaningfully limit claim scope for purposes of patent eligibility." *CLS Bank, Int'l v. Alice Corp.,* 717 F.3d 1269, 1286 (Fed.Cir. 2013) (en banc), *aff'd,* —— U.S. ——, 134 S.Ct. 2347, 189 L.Ed.2d 296 (2014) (citations omitted); *see Intellectual Ventures I,* 792 F.3d at 1367 (same). Therefore, the '081 Patent is not patent-eligible under § 101. *See Alice,* 134 S.Ct. at 2355; *Mayo,* 132 S.Ct. at 1294–97.

IV. THE '002 PATENT

The '002 Patent pertains generally to retrieving data from a remote location using an index or similar informational device to facilitate its location. Asserted claims 9, 11, 34, and 37, and claim 1, on which claim 9 depends, state:

> 1. A method for retrieving user specific resources and information stored either on a local device or a network server, the method comprising the steps of:
>
> retrieving a mobile interface from the network server to the local device;
>
> displaying the mobile interface on the local device, the mobile interface including a plurality of pointers corresponding to the user specific resources and information; and
>
> retrieving the user specific resources and information using the plurality of pointers displayed on the mobile interface.
>
> 9. A method according to claim 1, wherein the step of retrieving the mobile interface from the network server comprises the step of retrieving the mobile interface via a cellular network.
>
> 11. A method for retrieving user specific resources and information stored

either on a local device or a network server, the method comprising the steps of:

displaying the mobile interface on the local device, the mobile interface including a plurality of pointers corresponding to the user specific resources and information;

retrieving user profile and configuration data from the network server to the local device, wherein the user profile and configuration data is used to update the data associated with the mobile interface;

retrieving the user specific resources and information using the plurality of pointers displayed on the mobile interface.

34. A mobile interface used for retrieving user specific resources and information stored either on a local device or a network server, the mobile interface being adapted to move from one local device to another and adapted to be displayed on the local device, the mobile interface comprising:

a plurality of pointers that correspond to the user specific resources and information, wherein upon initiating a pointer, a user specific resource or information from either the local device or the network server is retrieved.

37. A mobile interface according to claim 34, wherein the plurality of pointers access the user specific resources and information stored on the network server via a cellular network.

A. Step One: Whether the Claims are Directed to an Abstract Idea

The '002 Patent enables a user "to dynamically access programs, applications, bookmarked URLs, IP addresses, telephone numbers, television channels, radio stations, user profiles, and the like [i.e., other digital files] that are specific to a user via any computer type device" through "pointers" that direct the user to the file he or she seeks. '002 Patent Abstract. "[A] pointer is a link/shortcut to an item such as a file, URL, IP address, telephone number, television channel, radio station, application, or service." '002 Patent, col. 10, lines 8–10.[8] Although the term pointer is used in the field of computing, it is analogous to any tag that directs a person to an object or data located elsewhere. As the Special Master observed, "[a]n index (such as the card catalog at a library) contains *pointers* to information (the books stored in a systematic manner)." R & R on '081 and '002 Patents 31 (emphasis added).

Thus, at its core, this patent is directed to the abstract idea of retrieving data located in another place by using a device with information that pinpoints the data's location to facilitate its retrieval. *See Bascom Research, LLC v. Facebook, Inc.*, 77 F.Supp.3d 940, 949–50 (N.D.Cal.2015) (holding that "the concept of establishing and using relationships between documents is a common, age-old practice" that "is not meaningfully different from classifying and organizing data"). This is the same idea at play when someone uses an index, table of contents, card catalog, directory, or address book to find information by locating a topic or name, noting the corresponding number or location, and going to that number or location to obtain the information sought. This concept of retrieving data from a remote location by relying on a label that identifies its location is a "fundamental ... practice long prevalent in our system." *Alice*, 134 S.Ct.

8. For summary judgment purposes, the parties and the Court adopt Plaintiffs' claim construction.

at 2356; *see Intellectual Ventures I,* 792 F.3d at 1369. Patenting it would foreclose others' use of this building block and stifle the creation of improved means of implementing this abstract idea. *See Alice,* 134 S.Ct. at 2356; *Intellectual Ventures I,* 792 F.3d at 1369.

The Intellectual Ventures companies maintain that the claimed invention is not abstract because it claims "a mobile interface." Pls.' Opp'n & Cross–Mot. Mem. 33. But, like the user interface in the '081 Patent, the mobile interface's inclusion in the '002 Patent does not preclude a finding of abstraction at step one, as other courts have found when considering claims that recite interfaces. *See, e.g., Intellectual Ventures I,* 792 F.3d at 1369–70; *Altec,* 2015 WL 993392, at *4; *MyMedicalRecords,* 2014 WL 7339201, at *2; *CertusView Techs.,* 111 F.Supp.3d at 708–09, 2015 WL 269427, at *16–17; *DietGoal Innovations,* 33 F.Supp.3d at 288–89; *Clear with Computers, LLC v. Dick's Sporting Goods, Inc.,* 21 F.Supp.3d 758, 767–68 (E.D.Tex.2014). This is because, at step one, courts only consider claims "[o]n their face," saving consideration of "the elements of the claim" for step two. *See Alice,* 134 S.Ct. at 2356–57. Thus, this limitation does not alter the overly-broad, abstract idea at the heart of the claims, namely retrieving data using information that identifies another location where the data is stored to facilitate its retrieval. Because it is abstract, I must consider step two to determine whether there is an inventive concept to make this idea patent-eligible. *See id.* at 2356; *Intellectual Ventures I,* 792 F.3d at 1369.

B. Step Two: Whether There is an Inventive Concept

The '002 Patent does not offer an inventive concept even though it recites "a mobile interface." The Intellectual Ventures companies' proposed claim construction, which Defendants and the Court adopt for purposes of determining patent eligibility, defines "mobile interface" as "[a] user interface accessible on different computing devices and capable of dynamically accessing user specific data stored on a network server and local device." Jt. Claim Constr. Chart for '002 Patent 1, Jt. Claim Constr. Stmt. Ex. D, ECF No. 202–4. The mobile interface "provides an ability to access files from anywhere from any device no matter where those e-files are located." R & R on '081 & '002 Patents 31. Plaintiffs note that "[a]n interface can be a program *or* a device, such as an electrical connector." Jt. Claim Constr. Chart for '002 Patent 2 (emphasis added). And, the claims refer to use across "network server[s]" as well as "cellular network[s]." Notably, the Federal Circuit has concluded that limitations such as this that provide for more than one possible means, such as a " 'communication medium' (broadly including the Internet and telephone networks)," do not "render the claims less abstract." *See Intellectual Ventures I,* 792 F.3d at 1367–68. Moreover, it concluded that the broadly-defined "communication medium" was a "generic computer element[ ] performing generic computer tasks" that did not "make [the] abstract idea patent-eligible." *Id.* at 1368. Thus, the question is whether the patent claims "additional steps" that are not "routine" to "transform [this] otherwise abstract idea into patent-eligible subject matter." *See Ultramercial,* 772 F.3d at 716.

As with the '081 Patent, the claimed invention appears to have identified a need, but not a concrete solution.

> It is not uncommon for many users to have multiple computers, PDAs, and other computer-related devices. Each individual computer or PDA may include specific menu items and bookmarks that do not exist in another computer or PDA. For example, a computer used at

> work may be the only device that includes a spreadsheet program while a computer used at home may be the only device that includes bookmarked URLs. Thus, the user will not have access to the bookmarks from the user's work computer and likewise, will not have access to the spreadsheet program from the user's home computer. As a result, this causes much inconvenience and inefficiency for the computer user.

'002 Patent, col. 2, lines 35–46. It appears that a mobile interface that allowed a user to access and modify his or her documents remotely and instantaneously would be useful.

But identifying the need is not enough; the claims must show *how* the problem is solved. Otherwise, the effect is a draftsman's skillful presentation preempting a field. *See Alice,* 134 S.Ct. at 2359; *Flook,* 437 U.S. at 593, 98 S.Ct. 2522. Claim 1 asserts "[a] method for retrieving user specific resources and information." '002 Patent, col. 17, lines 10–11. Unlike the representative claim for the '081 Patent, this claim recites "steps." *Id.* at col. 17, line 12. Yet the steps lack specificity, as Justice Breyer's approach in *Mayo* makes evident: It simply claims "retrieving [*somehow*] a mobile interface," "displaying [*somehow*] the mobile interface on the local device," and "retrieving [*somehow*] the user specific resources and information." *Id.* at col. 17, lines 13–21. The most detailed explanation of how the invention works that any step provides is that the information is retrieved "using [a] plurality of pointers." *Id.* at col. 17, lines 20. Claim 9 claims the method of Claim 1, adding the detail that the mobile interface is retrieved "via a cellular network." *Id.* at col. 17, lines 46–49. Claim 11, like Claim 1, claims "[a] method for retrieving user specific resources and information" and recites unspecific steps, namely "displaying [*somehow*] the mobile interface on the local device," "retrieving [*somehow*] user profile and configuration data from the network server," "retrieving [*somehow*] the user specific resources and information." *Id.* at col. 17, lines 54–67. Like Claim 1, Claim 11 only goes as far as to explain that the information is retrieved "using [a] plurality of pointers." *Id.* at col. 17, lines 66–67. Claim 34 claims "[a] mobile interface used for retrieving [*somehow*] user specific resources and information stored either on a local device or a network server, the mobile interface being adapted [*somehow*] to move from one local device to another and adapted [*somehow*] to be displayed on the local device," and claims that the mobile interface comprises "pointers that correspond to the user specific resources and information," and that, when initiated, "retrieve[ ] [*somehow*]" the resources and information to which they correspond. *Id.* at col. 19, lines 19–28. Finally, Claim 37 claims "[a] mobile interface according to Claim 34," adding the detail that the "pointers access the user specific resources and information ... via a cellular network." *Id.* at col. 19, lines 36–39.

In sum, Claims 1, 9, and 11 recite "steps" for a claimed method, and the steps comprise "retrieving" and "displaying" "a mobile interface," using "pointers" and, for Claim 9, "via a cellular network"; Claims 34 and 37 recite a "mobile interface" that is "adapted" and that comprises "pointers" that "retrieve[ ]" information, and for Claim 37, do so "via a cellular network." *Id.* at col. 17, lines 12–21, 46–49, 56–67; col. 19, lines 19–28, 36–39. Even adopting Plaintiffs' claim construction, there are no details about *how* the mobile interface operates, only *what* it does. Thus, as in *Intellectual Ventures I,* the claimed interface is nothing more than "a 'software' 'brain' 'tasked with ... providing [information] to the user,' " the use of which "provides no additional limitation beyond applying an abstract idea, restrict-

ed to the Internet, on a generic computer." 792 F.3d at 1371. As noted, the Federal Circuit and other courts have held that, when only a "vague and generic description[ ]" is provided, an interface is "a generic web server with attendant software," that is, a conventional, generic computer component that does "not confer patent eligibility" to an abstract idea. *See id.* at 1370–71; *see also MyMedicalRecords,* 2014 WL 7339201, at *2–3; *Dick's Sporting Goods,* 21 F.Supp.3d at 768.

Additionally, use of a pointer cannot be an inventive concept because the vast majority of data retrieval on computers involves the use of pointers. Indeed, the Intellectual Ventures companies concede that "[t]he patentee did not invent pointers," arguing instead that "[t]he patentee used pointers in a new, innovative way." Pls.' Reply 22. Thus, in referring to pointers and an interface, the '002 Patent, like the '081 Patent, claims "computer-aided" data retrieval without explaining "how a computer aids the method." *See Dealertrack,* 674 F.3d at 1333. And, retrieval "via a cellular network" is nothing more than use of a cellular network in the way one always is used. Thus, while these claims include steps, "the claimed sequence of steps comprises only 'conventional steps, specified at a high level of generality.'" *See Ultramercial,* 772 F.3d at 716. This "is insufficient to supply an 'inventive concept.'" *Id.* None of these uses "overrides the routine and conventional sequence of events ordinarily triggered" when these computer components are employed. *See DDR Holdings,* 773 F.3d at 1258–59. Moreover, the claims "describe[ ] the effect or result dissociated from any method by which [the underlying idea] is accomplished." *See Internet Patents Corp.,* 790 F.3d at 1348.

The Intellectual Ventures companies note that what is claimed is a "*mobile* interface" and insist that "[t]he inventor conceived of the idea of taking those pointers, and the information they reference, and intelligently converting then and combining them in a unified interface so that the user could access their files from any location." Pls.' Reply 22 (emphasis added). Yet, unlike in *DDR Holdings,* 773 F.3d at 1258–59, the claims do not include any "additional features" that describe sufficiently how this result is achieved. The claims do not recite the software or formula needed to accomplish the invention in a way that limits the preemptive effect from reaching all use of a computer to access remote information via an interface using pointers. That is a far cry from the limited foreclosure permitted in *Diehr,* 450 U.S. at 187, 101 S.Ct. 1048, or in *DDR Holdings,* 773 F.3d at 1259. And, again, unlike in *DDR Holdings,* "[t]he patent claims here do not address patents unique to the Internet." This further undermines any assistance Intellectual Ventures may seek from this decision.

The '002 Patent's specificity is similar to that of the patent-ineligible invention in *East Coast Sheet Metal Fabricating Corp. v. Autodesk, Inc.,* where the court found that the "claim only says what the invention does .... [w]ithout a disclosure of how the invention does what it does" and without including any "language ... that describes the computer programming involved in the invention as operating in anything other than their 'normal, expected manner.'" No. 12–517–LM, 2015 WL 226084, at *9 (D.N.H. Jan. 15, 2015) (quoting *DDR Holdings,* 773 F.3d at 1258). There, as here, "the patent merely recite[d] the use of a generic computer to perform generic computer operations." *Id.*

Even if the "how" were evident, the patentability remains questionable. According to Plaintiffs, the mobile interface enables a user to access digital data re-

motely. Pls.' Reply 21–22. But, a person can retrieve electronically-stored information from a remote location. For example, a user can access data without the interface by traveling to the location at which the data is stored and retrieving it, or having someone else at that location retrieve and forward the data. Significantly, computer components cannot render an abstract idea patent-eligible when, as here, the computer performs a function that a person could do. *See Altec*, 2015 WL 993392, at *4 (concluding that underlying idea was abstract, notwithstanding its "computer-implemented method," given that "[t]he steps performed by the claimed computer elements [were] functional in nature and could easily be performed by a human"); *DietGoal Innovations*, 33 F.Supp.3d at 283, 284 (concluding that "computer-implemented" steps that "could 'be performed in the human mind, or by a human using a pen and paper' " did not render asserted claims patent-eligible); *Mortgage Grader, Inc. v. Costco Wholesale Corp.*, 89 F.Supp.3d 1055, 1063, 1063–64 (Fed.Cir.2015) (concluding that computer component did not introduce an inventive concept to the underlying abstract idea because the claim was not "drawn to something that could not be done by a person"); *Dick's Sporting Goods*, 21 F.Supp.3d at 765 (stating that claim did not become patent-eligible based on the claim's "computer system with a configuration engine" limitation, because the claim could "be performed entirely by a human, mentally or with pencil and paper"); *Enfish, LLC v. Microsoft Corp.*, 56 F.Supp.3d 1167, 1175, 1177 (C.D.Cal.2014) (stating that the limitation of "indexing data stored in said table" was not inventive because "[h]umans engaged in this sort of indexing long before this patent").

[redacted] The Intellectual Ventures companies also argue that the mobile interface allows for instantaneous access, while "[a]n assistant in a room cannot transport a physical file anywhere in the world *instantly*." Pls.' Reply 21 (emphasis added). Yet, the fact that the mobile interface allows for faster retrieval does not transform the abstract idea into a patent-eligible concept, given that "[r]apid processing of data is a generic function of computers." *Enfish*, 56 F.Supp.3d at 1181. Stated differently, "claiming the improved speed or efficiency inherent with applying the abstract idea on a computer" does not "provide a sufficient inventive concept." *Intellectual Ventures I*, 792 F.3d at 1367; *CLS Bank, Int'l v. Alice Corp.*, 717 F.3d 1269, 1286 (Fed.Cir.2013) (en banc) *aff'd*, —— U.S. ——, 134 S.Ct. 2347, 189 L.Ed.2d 296 (2014). Therefore, the '002 Patent is not patent-eligible under § 101. *See Alice*, 134 S.Ct. at 2355; *Mayo*, 132 S.Ct. at 1294–97.

V. CONCLUSION

I will adopt the Special Master's factual findings but reject his conclusions of law as to the '081 & '002 Patents. I will grant Defendants' motions as to these patents, and deny Plaintiffs' motions as to these patents. The motions as to the '409 & '084 Patents remain pending.

A separate Order follows.

[redacted]

PATHFINDER SOFTWARE, LLC, Plaintiff,

v.

CORE CASHLESS, LLC, Defendant.

No. 1:14–cv–633.

United States District Court, M.D. North Carolina.

Signed Aug. 28, 2015.

[redacted]