

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND**
Southern Division

INTELLECTUAL VENTURES I LLC,
et al.,

Plaintiffs/Counterdefendants,

v.

CAPITAL ONE FINANCIAL CORP.,
et al.,

Defendants/Counterclaimants.

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Case No.: PWG-14-111

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**REPORT AND RECOMMENDATION OF THE SPECIAL MASTER REGARDING
PLAINTIFFS' AND DEFENDANTS' CROSS-MOTIONS FOR SUMMARY JUDGMENT
ON THE ISSUES OF PATENT ELIGIBILITY AND VALIDITY UNDER 35 U.S.C. § 101
WITH RESPECT TO THE '081 PATENT AND THE '002 PATENTS**

Pursuant to Paragraph 3(b) of the Stipulated Order Appointing Special Master in this case (Doc. 143), the Special Master respectfully submits the following Report and Recommendation to United States District Judge Paul W. Grimm of the United States District Court for the District of Maryland.

This Report and Recommendation addresses (1) CAPITAL ONE DEFENDANTS' MOTION FOR SUMMARY JUDGMENT OF INVALIDITY UNDER 35 U.S.C. § 101 (Doc. 147) (hereinafter Defendants' Motion); and (2) PLAINTIFFS INTELLECTUAL VENTURES' CROSS-MOTION FOR PARTIAL SUMMARY JUDGMENT (Doc. 169) (hereinafter Plaintiffs' Cross-Motion). Through their Motion, Defendants seek a judgment that United States Patent No. 7,984,081, entitled "System and Method for Non-Programmers to Dynamically Manage Multiple Sets of XML Document Data" (hereinafter the "'081 Patent"), and United States Patent No.

6,546,002, entitled “System and Method for Implementing an Intelligent and Mobile Menu-Interface Agent” (hereinafter the “’002 Patent”) are not patent-eligible under 35 U.S.C. § 101 and are therefore invalid as a matter of law. Plaintiffs’ Cross-Motion seeks the opposite result — a judgment as a matter of law that the patents are eligible and valid under 35 U.S.C. § 101.¹

The parties have filed Oppositions and Reply Memoranda in support of their arguments (Docs. 169, 227, 246), along with a Joint Appendix containing 27 Exhibits (hereinafter “Joint App.”). Pursuant to the Special Master’s request, the parties also submitted Letter Briefs to the Special Master dated April 13, 2015. Those Letter Briefs were not filed on the Court’s docket and are herewith attached as Exhibit A (Defendants’ April 13, 2015 Letter Brief), and Exhibit B (Plaintiffs’ April 13, 2015 Letter Brief). A hearing was held on the cross-motions on April 16, 2015, and a transcript of those proceedings is attached as Exhibit C.

For the reasons stated below, the Special Master recommends a judgment of patent-eligibility with respect to both patents.

I. Summary Judgment Standard: Fed. R. Civ. P. 56

Rule 56(a) of the Federal Rules of Civil Procedure provides that a “court shall grant summary judgment if the movant shows 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). “In determining whether a genuine issue of material fact exists, [the court] must view the facts and

¹ The Motions were also directed at two other patents in this case, United States Patent No. 6,314,409 and United States Patent No. 6,715,084. However, in light of a recent decision by the United States District Court for the Southern District of New York rendered on April 29, 2015 holding that claims in both patents asserted against JP Morgan Chase Defendants were not patent eligible under 35 U.S.C. § 101, *Intellectual Ventures v. JPMC*, Case No. 1:13cv3777-AKH, this Court has ordered a stay until June 12, 2015 to allow plaintiffs and defendants to brief the issue of the effect of that decision with respect to those same patents in this case. By Order of this Court, neither of those patents are addressed here. See Doc. 292.

draw all reasonable inferences in the light most favorable to the non-moving party.” *Glynn v. EDO Corp.*, 710 F.3d 209, 213 (4th Cir. 2013); *see also Hoschar v. Appalachian Power Co.*, 739 F.3d 163 (4th Cir. 2014). However, the Supreme Court has made clear that in order to demonstrate the existence of a genuine issue of material fact, the opposing party must do more than prove “[t]he mere existence of a scintilla of evidence.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 252 (1986). The party opposing summary judgment must make a showing of specific facts — if the “evidence is merely colorable, or is not significantly probative, summary judgment may be granted” to the moving party. *Liberty Lobby*, 477 U.S. at 249-50.

II. Applicable Patent Standard: 35 U.S.C. § 101 and the *Alice/Mayo* Two-Step Test

Section 101 of the Patent Act (2012) provides for “four independent categories of inventions or discoveries that are eligible for protection: processes, machines, manufactures, and compositions of matter.” *Bilski v. Kappos*, 561 U.S. 593 (2010). The precise language of the Act is:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

35 U.S.C. § 101 (2012). As the Supreme Court has explained, “[i]n choosing such expansive terms . . . modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope.” *Bilski*, 561 U.S. at 593-94 (*quoting Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980)). The rationale underlying this “permissive approach,” is to “ensure that ‘ingenuity should receive a liberal encouragement.’” *Id.* at 594; *Diamond*, 447 U.S. at 308-309 (quoting 5 Writings of Thomas Jefferson 75-76 (H. Washington ed. 1871)). While there is great breadth to the explicit statutory language, the Supreme Court has “long held” that Section 101 has an “important implicit exception: Laws of nature, natural phenomena, and abstract ideas

are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Intern.*, 134 S. Ct. 2347, 2354 (2014) (quoting *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013)). The Court explained that such an “exception” to patentability is a principled one:

Laws of nature, natural phenomena, and abstract ideas are the basic tools of scientific and technological work. Monopolization 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, 134 S. Ct. at 2354 (internal citations and quotations are omitted); *see also Bilski*, 561 U.S. at 602 (“The concepts covered by these exceptions are ‘part of the storehouse of knowledge of all men . . . free for all men and reserved exclusively to none.’”) (quoting *Funk Brothers Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)). However, the Court recognized that such an “exception” — no matter how well-established and well-purposed — runs the risk of “swallow[ing] all of patent law,” *Alice*, 134 S. Ct. at 2354, because “at some level, ‘all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.’” *Id.* (quoting *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289, 1293 (2012) (“The Court has recognized . . . that too broad an interpretation of this exclusionary principle could eviscerate patent law.”)).

Against this Section 101 backdrop — express statutory breadth accompanied by an “important implicit exception” — the Supreme Court in both *Mayo* (2012) and *Alice* (2014), established a two-step test for determining patent-eligibility (referred to throughout this Report as the “*Alice/Mayo*” test). The first step involves a determination as to whether the patent claims at issue are directed to an abstract idea. *Alice*, 134 S. Ct. at 2355. If the claims are drawn to an abstract idea, the second step involves a consideration of 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. *Id.* The second step is the “search for an ‘inventive concept.’” *Id.*

Prior to *Alice*, the Supreme Court has held several claimed inventions to be patent-ineligible on the grounds that they were nothing more than abstract ideas. *See, e.g., Bilski supra* (invention ineligible where it claimed a series of steps instructing how to hedge risk, and then “put that concept . . . into a simple mathematical formula;” the patent also covered well-established “statistical approaches” and “random analysis techniques;” the idea of “hedging” was considered a “fundamental economic practice,” *id.* at 599, 611); *Parker v. Flook*, 437 U.S. 584, 585, 594-95 (1978) (patent ineligible where claims covered a mathematical formula for “updating alarm limits” in a catalytic conversion process); *Gottshalk v. Benson*, 409 U.S. 63, 64-68, 72 (1972) (invention ineligible where the patentee sought a patent for “converting binary-coded decimal (BCD) numerals into pure binary numerals,” essentially seeking to patent the “algorithm” itself).

However, in *Diamond v. Diehr*, 450 U.S. 175, 177, 184 (1981), the Supreme Court held that a computer-implemented process for “molding raw rubber into cured products” was indeed “eligible to receive protection” under § 101. The Court in *Alice* commented on the *Diehr* reasoning:

Even though the claim at issue employed a “well-known” mathematical equation, it used that equation in a process designed to solve a technological problem in “conventional industry practice.” The invention . . . used a “thermocouple” to record constant temperature measurements inside the rubber mold — something “the industry ha[d] not been able to obtain.” The temperature measurements were then fed into a computer, which repeatedly recalculated the remaining cure time

by using the mathematical equation. These additional steps . . . “transformed the process into an inventive application of the formula.”

Alice, 134 S. Ct. at 2358 (internal citations omitted).

Alice is the latest Supreme Court decision on the issue of patent-eligibility under 35 U.S.C. § 101. The Court applied the two-part test from its *Mayo* decision and concluded that the patents at issue were not eligible for protection under the patent laws. In *Alice*,

[t]he claims at issue relate[d] to a computerized scheme for mitigating "settlement risk" *i.e.*, the risk that only one party to an agreed-upon financial exchange will satisfy its obligation. In particular, the claims [we]re designed to facilitate the exchange of financial obligations between two parties by using a computer system as a third-party intermediary.

Alice, 134 S. Ct. at 2352. Examining step one, the Court held that the patent claims at issue were drawn to the abstract idea of intermediated settlement. And as to step two, the Court found that the claims did “nothing significantly more” than instruct the practitioner to implement the instructions on a generic computer. *Id.* at 2360. Accordingly, that mere generic computer implementation failed to transform the abstract idea of “intermediated settlement” into protectable subject matter. The Court reasoned that “[t]aking the claim elements separately, the function performed by the computer at each step of the process [wa]s “[p]urely conventional” The same is true with respect to the use of a computer to obtain data, adjust account balances, and issue automated instructions; all of these computer functions are "well-understood, routine, conventional activit[ies]" previously known to the industry.” *Id.* at 2359. The Court also noted that “[t]he method claims do not . . . purport to improve the functioning of the computer itself or effect an improvement in any other technology or technical field.” *Id.* The claims were simply “not ‘enough’” to have the required transformation of the abstract idea. *Id.* (*quoting Mayo*, 132 S. Ct. at 1298).

The United States Court of Appeals for the Federal Circuit has addressed the *Alice/Mayo* framework in several decisions, all of which are briefed extensively by the parties. For example, in *Content Extraction and Transmission v. Wells Fargo Bank, N.A.*, 776 F.3d 1343 (2014) (petition for rehearing en banc denied March 12, 2015), the Federal Circuit affirmed the district court’s Fed. Rule Civ. P. 12(b)(6) dismissal of the patentee’s claims on the grounds of ineligibility under Section 101. The patent claims at issue in that case pertained to “a method of (1) extracting data from hard copy documents using an automated digitizing unit such as a scanner, (2) recognizing specific information from the extracted data, and (3) storing that information in memory.” *Id.* at 1345. The court explained that the patented method was one that “[could] be performed by software on an automated teller machine (ATM) that recognizes information written on a scanned check, such as the check’s amount, and populates certain data fields with that information in a computer’s memory.” *Id.*

Utilizing step one of *Alice*, the court held that the patent claimed the abstract idea of “(1) collecting data, (2) recognizing certain data within a collected data set, and (3) storing that recognized data in memory.” *Id.* at 1347.

The concept of data collection, recognition, and storage is undisputedly well-known. Indeed, humans have always performed these functions. And 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.

Id.

As to step two of *Alice*, the court went on to analyze whether any of the limitations, either individually or combined, transformed the abstract idea. *Id.* The court looked at whether the role of the computer in the computer-implemented method was “meaningful,” *i.e.*, that it was more than conventionally known in the industry. *Id.* at 1347-48. The court found significant

that the patentee acknowledged that the “use of a scanner or other digitizing device to extract data from a document was well-known at the time of the filing,” and that “the ability of computers to translate the shapes on physical typeface characters” was conventional. *Id.* at 1348. Therefore, the court felt there was “no ‘inventive concept’ in the patentee’s use of a generic scanner and computer to perform well-understood, routine and conventional activities commonly used in the industry.” *Id.* The court went on to explain that, “at most,” the patentee was attempting to limit the abstract idea “to a particular technological environment” and that was insufficient as a matter of law. *Id.*

In *Ultramercial, Inc. v. Hulu, Ltd.*, 772 F.3d 709 (Fed. Cir. 2014) (petition for rehearing en banc denied, Feb. 20, 2015), the court held unpatentable a “method for distributing copyrighted media products over the Internet where the consumer receives the . . . product at no cost in exchange for viewing an advertisement and the advertiser pays for the copyrighted content.” *Id.* at 712. The court found that the steps merely “recite[d] an abstraction — an idea, having no particular concrete or tangible form.” *Id.* at 715. The crux of the invention was showing an ad before providing free content. *Id.* Furthermore, the court found that additional limitations in the patent were nothing more than implementing the abstract idea with routine activity. *Id.* at 715-16. The court also reasoned that the claims’ mere “invocation of the Internet” did not make the claims inventive or save it from abstraction. *Id.* (citing *CyberSource Corp. v. Retail Decisions Inc.*, 654 F.3d 1366 (Fed. Cir. 2011) (where the court held that the use of the internet to verify credit card transactions did not transform the patent’s abstract idea into something meaningful). The court went on to state that “[a]ny transformation from the use of computers or the transfer of content between computers is merely what computers do and does not change the analysis.” *Id.* at 717. To be sure, the Federal Circuit in *Ultramercial* was not

seeking to eviscerate all software-based patents. Indeed, the court in *Ultramercial* specifically stated that “[f]uture cases may turn out differently.” *Id.* at 715.

Just a few weeks after *Ultramercial*, the Federal Circuit issued a decision in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (2014), upholding the patent claims at issue. The court recognized 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. But noted that “mathematical algorithms, including those executed on a generic computer” and “some fundamental economic and conventional business practices” are abstract ideas. *Id.* at 1256. The court also noted that “[i]n some instances, the patent-ineligible abstract ideas are plainly identifiable and divisible from the generic computer limitations recited by the remainder of the claims,” and listed examples of such “plainly identifiable and divisible” ideas from the caselaw: (1) claims that “simply instructed” application of an abstraction to a generic computer (*Alice, supra*); (2) claims that applied an abstract idea to a “particular technological environment” (*Ultramercial, supra*); (3) “claims that recited no more than using a computer to send and receive information over a network in order to implement an abstract idea” (*buySafe, Inc. v. Google, Inc.*, 765 F.3d 1350 (Fed. Cir. 2014)); (4) “claims that merely recited generalized software components arranged to implement an abstract concept . . . on a computer” (*Accenture Global Servs., GmbH v. Guideware Software, Inc.*, 728 F.3d 1336 (Fed. Cir. 2013)); and (5) claims reciting use of a computer to perform “repetitive calculations” (*Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012). *DDR*, 773 F.3d at 1256-57.

The patents at issue in *DDR Holdings* were “directed to systems and methods of generating a composite web page that combine[d] certain visual elements of a ‘host’ website with content of a third-party merchant.” *DDR*, 773 F.3d at 1248. As explained in the specification of the patents, the invention was trying to solve a problem in the prior art where the host visitors’ traffic was diverted to the third-party merchant’s website when they clicked on the merchant’s advertisement link on the host’s website. *Id.* The claimed invention solved the problem faced by the host

by creating a new web page that permits a website visitor, in a sense, to be in two places at the same time. On activation of a hyperlink on a host website—such as an advertisement for a third-party merchant—instead of taking the visitor to the merchant’s website, the system generates and directs the visitor to a composite web page that displays product information from the third-party merchant, but retains the host website’s “look and feel.” Thus, the host website can display a third-party merchant’s products, but retain its visitor traffic by displaying this product information from within a generated web page that “gives the viewer of the page the impression that she is viewing pages served by the host” website.

Id. at 1248-49 (internal citations to the patents omitted). The court found that no matter how the idea in the claimed invention was characterized or articulated, it satisfied step two of the *Alice* test. *Id.* The court distinguished prior decisions, stating that while the claims at issue do involve both a computer and the internet:

[T]he[] claims stand apart because they do 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 is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.*”

Id. at 1257 (italics added). The limitations gave rise to an inventive concept (system and methods yielding a specialized, composite web page) that are not merely the routine or conventional use of the internet. *Id.* The Court also found that the patentee was *not* trying to

monopolize some abstract idea — the patentee simply came up with an inventive way to resolve a “particular internet-centric problem.” *Id.* at 1259.

Since the *Alice* decision, there have been numerous district court decisions applying the two-part test to the specific patents at issue, *treating the § 101 issue as purely a matter of law*. See, e.g., *Messaging Gateway Solutions, LLC, v. Amdocs*, Civ. Act. No. 14-732, RGA, 2015 WL 1744343 (D. Del. April 15, 2015) (granting patentee’s motion for judgment on the pleadings of validity pursuant to 35 U.S.C. § 101, and denying defendant’s cross-motion for invalidity; “method of using a computer system to facilitate two-way communication between a mobile device and internet server;” ruling that while the claims contained the abstract idea of translation, the limitations therein transformed them into an inventive concept; finding “*DDR* apposite;” holding that the invention is “firmly rooted in computer technology,” as “[i]t specifies how an interaction between a mobile phone and a computer is manipulated to achieve a desired result which overrides conventional practice.”); *Smartflash LLC v. Apple, Inc.*, Case No. 6:13-CV-447-JRG-KNM (E.D. Tex. January 21, 2015, Report and Recommendation of United States Magistrate Judge, adopted by the district court on February 13, 2015 (No. 13-447, 2015 WL 661174)) (denying the defendants’ motion for summary judgment of invalidity; patents at issue related to data storage and access systems for paying for and downloading digital content; holding that “the general purpose of the claims — conditioning and controlling access to data based on payment — is abstract and a fundamental building block of the economy in the digital age,” but ruling that the limitations in the claims recited “specific ways of using distinct memories, data types, and use rules that amount to significantly more than the abstract idea”); *TQP Development, Inc. v. Intuit Inc.*, 2014 WL 651935, at *7 (E.D. Tex. Feb. 9, 2014) (ruling patent eligible where the plain language of the claim language was not simply a “method of

doing business that happens to be implemented on a computer; instead, it involv[ed] a method for changing data in a way that will affect the communication itself, by making it more secure”).²

III. The Patent Claims at Issue

There has been no claim construction hearing or order issued in this case, although the briefing on claim construction issues was completed on April 7, 2015. The parties to these cross-motions agree, however, that claim construction is not necessary to resolving these motions. *See* April 16, 2015 Hearing Transcript, Exhibit C hereto (hereinafter “Hearing Tr.”) at 204-05, where Defendants agree to adopt Plaintiffs’ claim construction conditions for purposes of the Section 101 issue. Indeed, the Federal Circuit has stated that “[a]lthough 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.” *See Content Extraction*, 776 F.3d at 1349 (rejecting patentee’s argument that the district court erred by not conducting a claim construction prior to the invalidity determination, noting that the court construed the patents in a manner most favorable to the patentee); *Ultramercial*, 772 F.3d at 714-15.

Further, the Special Master need not resolve the issue of whether a “presumption of eligibility” exists under §101 and the associated standard of proof for any such presumption.

² Indeed, several district court decisions involving the § 101 patent-eligibility issue have involved patents owned by plaintiffs. *See Intellectual Ventures v. JP Morgan Chase*, Case No. 1:13cv3777-AKH (S.D.N.Y. April 29, 2015) (finding three patents ineligible, two of which are still part of IV’s present case against the Capital One Defendants, but are currently the subject of a stay until June 12, 2015, see note 1 *supra*); *Intellectual Ventures et al. v. Symantec et al.*, CA No. 10-1067-LPS (D. Del. April 22, 2015) (ruling two patents ineligible; one patent eligible); *Intellectual Ventures I, LLC et al. v. Motorola Mobility LLC*, Civ. No. 11-908-SLR (D. Del. February 24, 2015) (finding one patent eligible, one not eligible); *Intellectual Ventures v. Capital One*, Civil Action No., 1:13-cv-00740 (AJT)(E.D. Va. April 16, 2014)(ruling two patents ineligible, currently on appeal).

Plaintiffs advocate for a presumption of validity and the clear and convincing standard of proof to invalidate the patents at issue under § 101, Plaintiffs' Opening Brief at 4, and defendants dispute that such a presumption of eligibility is appropriate. Capital One's Opening Brief at 6. The Special Master concludes that, for reasons presented below and even assuming no presumption exists (an assumption favorable to defendants), the patents are eligible under Section 101 as a matter of law.³

A. The '081 Patent

The '081 patent is directed to “a system and method for dynamically retrieving, manipulating, updating, creating, and displaying data from sources of Extensible Markup Language (XML) documents.” '081 Patent: Abstract (cover page). It is indisputable that XML is a specialized, computer language. *See* Exhibit 11 of the Joint Appendix, Record 0186-0204. Generally speaking, XML “is defined by the [World Wide Web Consortium's] XML 1.0 Specification and other related specifications.” *Id.* at Record 0187. Essentially, it is a “string of [Unicode] characters,” with “markup constructs” and “content.” *Id.* at Record 0189. The markup constructs are called “tags” generally comprised of “start-tags” “end-tags” and “empty-element tags.” *Id.*

The Patent explains that “companies use XML documents to publish various types of information for use by customers and partners.” '081 Patent: Background of the Invention, col. 1,

³ Plaintiffs have submitted the Declaration of John P.J. Kelly, PH.D, Exhibit 22 of the Joint Appendix, Record 0416 through 0431, on the issues relating to the '081 Patent, and the Declaration of Martin Kaliski, Exhibit 19 of the Joint Appendix, Record 0350 through 0371, on the issues of pertaining to the '002 patent, and there is a dispute between the parties as to whether the Court should look to expert testimony on Section 101 issues. *See, e.g.*, Hearing Tr. at 201. The Special Master does not need to decide this subsidiary issue, as the claims themselves and the intrinsic evidence of both the '081 and the '002 patents are sufficient to decide the Section 101 issues.

lines 28-29. XML documents typically contain information pertaining to business transactions such as “invoices, purchase orders, customer profiles and price lists.” *Id.* at col. 1, lines 29-33. “Computer programmers design these XML document formats in a technical manner.” *Id.* at col. 1, lines 33-34. Further, “[a]s of 2009, hundreds of document formats using XML syntax have been developed.” Exh. 11 at Record 0188.

The Patent states that “[w]hile XML formats are convenient for the company that creates them, the partners of that company may find them incompatible with their own XML formats, relational data-based schemes, and message formats and therefore difficult to work with.” *’081 Patent*, col. 1, lines 37-41. Because of these differences, companies are forced to create a program “to merge, filter and transform XML documents into the format they want,” and therefore the XML documents pose a difficult challenge for a “business person and non-technical persons to operate.” *Id.* at col. 1, lines 41-45.

The disclosed and claimed invention of the *’081 Patent* purports to solve this problem by “allow[ing] 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.” *Id.* at col. 1, lines 45-48. The system specifically effectuates this solution by creating “dynamic documents” based on “management record types” (referred to as “MRTs”) and “primary record types” (referred to as “PRTs”). *Id.* at Claim 21, col. 20, lines 43-61.

Plaintiffs assert claims 21, 22 and 24 of the *’081 patent* against defendants. Claim 21 is the only independent claim at issue, with claims 22 and 24 being dependent thereon. Both parties agree that Claim 21 is “representative” for purposes of the Section 101 analysis, but plaintiffs further note that “the dependent claims involve further limitations on how the claimed dynamic

document changes the underlying XML documents.” *See April 13, 2015 Letter Briefs, attached as Exhibits A and B.*

The precise language of the claims at issue are as follows, including the text of Claim 23, since it is referenced in asserted Claim 24.

21. An apparatus for manipulating XML 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.

22. The apparatus of claim 21,

wherein an instance of one of the primary record types includes or points to a relational database table of that primary record type; and

wherein the instance of the management record type points to instances of the primary record types.

23. The apparatus of claim 21, wherein the management record type defines business objects and the instances of the management record type comprises the business objects.

24. The apparatus of claim 23, wherein the business objects comprise invoices, bills of material, purchase orders, price books, forecasts, or fund transactions.

'081 Patent, col. 20, lines 43-67; col. 21, lines 1-6.

1. Step One of the *Alice/Mayo* Test: Is the invention as claimed directed to an “abstract idea?”

With respect to the *Alice/Mayo* two-step test outlined above, the first step will now be addressed. The parties' positions on whether the '081 claims embody an abstract idea have been thoroughly briefed, and heard during oral argument, and have been carefully reviewed and considered.

Capital One argues that Claim 21, the representative claim, is drawn to the abstract idea of “organizing and modifying data relating to documents” (“mere data manipulation”) and that idea is analogous to the ideas ruled as abstract by the Federal Circuit (such as “data storage”), and falls within the “abstract idea” construct of *Alice*. Capital One's Opening Brief at 3, 22-23. It further argues in its Reply Brief that the concepts embodied by the claims in the '081 patent are comparable to that of a human translator. Capital One's Reply Brief at 1.

Plaintiffs take issue with Capital One's characterization of the claims as “mere data manipulation.” IV's Opening Brief at iii. Plaintiffs also disagree with the notion that “software that creates a dynamic document user interface that synthesizes multiple XML formats into one unified format and allows the user to manipulate all XML documents through the dynamic document” is comparable to a human translator. IV's Reply Brief at 1. According to IV:

One can hardly conceive of a more concrete, fact-based idea than that of the '081 patent. Developing specific methods for non-programmers to manipulate XML documents regardless of compatibility and presenting them to the user is not an abstract and age-old idea like “intermediated settlement” as in *Alice* . . . or “hedging” in *Bilski* or a “building block of human ingenuity.” There is also no evidence of a longstanding, decades old, fundamental precept of non-programmers being able to manipulate different types of XML documents.

IV's Opening Brief at 20-21. Further, IV argues that Claim 21 does not embody an algorithm, "disembodied concept," "method of organizing human behavior," "theoretical concept[]," or some other established exception to patent eligibility. *Id.* at 2, 21.

In addition to setting forth its argument that the '081 patent does not represent the types of abstract ideas covered by existing Supreme Court precedent, IV explains that Capital One's characterization of the '081 patent as "abstract" defies the well-accepted and basic meaning of "abstract," as defined in a dictionary. *See* Joint App. Exh. 9, Excerpt from Merriam Webster Dictionary, at Record 0174-0175 (defining "abstract" as "disassociated from any specific instance," "insufficiently factual," "theoretical," "expressing a quality apart from an object").

After considering the parties' arguments both in briefs and at oral argument, the '081 Patent and the claims at issue, the Special Master agrees with plaintiffs that the claimed invention is not an abstract idea. Capital One's characterization of the claims as merely representing something as generic and broad as "data storage" and its analogy of the patent to activities performed by a "human translator" or something that can be achieved through use of a pen and paper, is excessively detached from the specificity and plain language of the claimed invention, and the overall intrinsic evidence pertaining to the patent.

In particular, the claimed invention of the '081 Patent is instead directed to an apparatus in which any one of a myriad type of XML documents with different syntax is parsed and the elements (for example, "tags" in the parlance of XML) are assigned to PRTs, and those PRTs are assigned to MRTs, and both of those objects are used to create a "dynamic document" (DD) displayed to a user in plain text, and which allows a user without a technical understanding of the XML structure to make changes to the underlying document in plain text. *See Claim 21, supra,*

'081 Patent, col. 20, lines 43-61 (italics added) (listing the components of the apparatus, expressly including “a component that maps the data components of each data object to one of the plurality of primary record types [PRTs]; a component that organizes the instances of the plurality of primary record types into a hierarchy to form a management record type [MRT]; a component that defines a *dynamic document* [DD] 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”).

In other words, the disclosed and claimed apparatus of the '081 patent mediates the use and manipulation of XML documents by a user not familiar with XML by handling the edits and changes via the use of the PRTs and MRTs. The Specification of the Patent further details how the claimed apparatus works:

The system imports XML document data into the system data definitions (an integrated combination of Relational and Object), processes the data using the business rules definitions and exports XML documents. The system can automatically create XML document formats from its data definitions and can automatically create its data definitions from XML document formats; the system-user can also define the mapping between XML document formats and the system data definitions. The system data definition is the combination of a Relational data model, an Object data model, and an XML data model.

'081 patent, col.1, line 52-col. 2, line 3. The Patent Specification continues to state:

The system's data structure is much more sophisticated than that of a relational database or a set of XML documents. Unlike a relational database, the business rules can use the complex data relationships of the MRTs and DDs, and system-users can easily define views of the data that do not conform to the constraints of the relational data model. Unlike a set of XML documents, the system-user can easily merge data from multiple XML document formats. Also the system stores only one instance of duplicate XML components; manipulating the one instance automatically affects all XML documents that include that instance.

'081 patent, col. 2, lines 11-23. Referring to exemplary Figures 1 and 2, the Patent explains:

The present invention interfaces with the underlying XML documents by copying the XML data components into normalized data objects referred to as PRTs and organizing the PRTs into recognizable business objects referred to as MRTs 24. Examples of business objects that are modeled as MRTs with the present invention include, but are not limited to: invoices, bills of material, purchase orders, price books, forecasts, and fund transactions. ***The present invention advantageously works in conjunction with underlying data sources 38, 40 to reconstitute data stored therein into a structure recognizable by and easily manipulated by the businessperson. The user can define functions (calculations), filters (selection criteria), sorts, and DDs (display and organization rules) over MRTs.***

'081 patent, col. 3, line 66 to col. 4, line 12, emphasis supplied.

Accordingly, both the claims and specification dictate the same conclusion: the '081 patent does not represent a mere algorithm, a mere mathematical calculation, a mere mental process, a “basic scientific and technological tool,” a “building block of human ingenuity,” or an idea that is “part of the storehouse of knowledge of all men . . . free for all men.” See *Alice*, 134 S. Ct. at 2354 and *Bilski*, 561 U.S. at 602; *Parker v. Flook*, 437 U.S. 584 (1978); *Gottshalk v. Benson*, 409 U.S. 63 (1972), and the other cases discussed *supra* at pages 3-6.

While Capital One relies on the *Alice* rubric and the Federal Circuit’s decisions in *Content Extraction, Digitech Image Techs, LLC v. Electronics for Imaging*, 758 F.3d 1344 (2014), *Cybersource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366 (2011), and *Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App’x 988 (2014), the fact patterns presented in those cases are not analogous to the idea expressed in the '081 Patent. In *Alice*, the patentee sought to patent a basic economic concept, the “plainly identifiable and divisible” idea of “intermediated settlement,” using generic computer implementation. See *Alice discussion supra*, and *DDR*, 773 F.3d at 1256. In *Content Extraction*, the patentee sought to patent the mere extraction of data from a hard copy document through the use of, for example, a scanner, and store that data in a computer’s memory. For the Federal Circuit, that concept was much too technologically generic

to constitute more than data storage. Likewise, in *CyberSource*, the claims were directed to verifying the validity of credit card transactions over the Internet by collecting and organizing the “reading [of] credit card numbers and Internet addresses,” 654 F.3d at 1350-51, and that was too abstract. In *Cyberfone*, a case identified by the Federal Circuit as “nonprecedential,” the claims were directed at collecting telephone-related information, sorting it, and transmitting it as sorted, and that idea was similarly abstract. 558 F. App’x at 991-93. In *Digitech*, the Federal Circuit held as abstract claims that were literally directed to “a method comprising . . . generating first data . . . generating second data . . . and combining said first and second data.” *Digitech*, 758 F.3d at 1350-51. The Federal Circuit explained that all the claims at issue accomplished was taking two existing data sets and merely combining them. *Id.*

The claims at issue in those cases heavily relied on by Capital One have a substantially different character than the disclosed and claimed invention of the ’081 Patent. The ’081 Patent, including its claims, is directed to an apparatus utilizing a specific method for dynamically retrieving, manipulating, updating, creating, and displaying data from different types of XML documents – documents that contain a very specialized, computer language and can differ significantly from business to business in terms of formats and syntax. Significantly, the “apparatus” of the Claims 21, 22, 23, and 24, as explained in the Specification, uses a structure that goes *beyond* relational databases and mere document sets. *See, e.g.*, ’081 patent, col. 2, lines 11-23 (“The system's data structure is much more sophisticated than that of a relational database or a set of XML documents. Unlike a relational database, the business rules can use the complex data relationships of the MRTs and DDs, and system-users can easily define views of the data that do not conform to the constraints of the relational data model”); ’081 patent, col. 3, line 66 to col. 4, line 12 (“The present invention advantageously works in conjunction with underlying

data sources 38, 40 to reconstitute data stored therein into a structure recognizable by and easily manipulated by the businessperson. The user can define functions (calculations), filters (selection criteria), sorts, and DDs (display and organization rules) over MRTs”). Thus, this highly, specialized idea is not mere data storage, organizing credit card numbers and internet addresses, sorting telephone information or combining two existing data sets into one data set.

To be sure, the claims do recite words such as “organizing” and “defining” and “identifying” but those words cannot be read in isolation from the remainder of the claims.

Indeed, the recent observation made by United States District Judge Andrews in the District of Delaware in *Messaging Gateway* applies here that

If one looks at almost any patent from far enough away, it could arguably claim an abstract idea. For example, Alexander Graham Bell’s patent could be said to claim the abstract idea of oral communication. But his invention was not the concept of oral communication itself; it was a technological innovation that allowed a type of communication between people who could otherwise not communicate in that way.

Messaging Gateway, 2015 WL 1744343 at *5.

It is also noted that software-based patents in particular, such as this one, require a more close, and focused lens, or else the cautionary tale set forth by the Supreme Court in *Alice*, where the “abstract idea” exception swallows the broad statutory language of Section 101, may in fact come to a fruition.

In light of the foregoing, the Special Master recommends the conclusion that the ’081 patent is not drawn to an abstract idea, and that alone is determinative and supports denial of Capital One’s Motion for Summary Judgment under 35 U.S.C. § 101 with respect to the ’081 Patent, and the granting of Plaintiffs’ Cross-Motion for Partial Summary Judgment as to the ’081 Patent.

2. Step Two of the Alice/Mayo Test: Inventive Concept?

Notwithstanding the conclusion *supra* that the ’081 Patent is not drawn to an abstract idea, which by itself is determinative of the Section 101 issue concerning that patent, for

purposes of completing the legal review, the Special Master addresses the parties' arguments made in conjunction with step two of the *Alice/Mayo* test, whether there is an inventive concept worthy of patent eligibility.

Capital One argues that the limitations in the claims simply “restate the abstract idea in functional terms,” and that the functions are “routine and conventional,” such as receiving data, parsing data, displaying data. Capital One’s Opening Brief at 28-29. Capital One also argues that the addition of “XML” is not transformative because it is simply a “field of use restriction.” Capital One Ltr. Brief at 2. In essence, Capital One argues that there is nothing inventive added by the claims.

IV, in response, argues that Capital One ignores one of the major aspects to the invention — the creation of the “dynamic documents,” Opening Brief at 25 and Hearing Tr. at 282, which “allow[] the user to view and update XML documents in different formats, and allow[] the user to manipulate the data and perform actions without programming skills.” *See '081 Patent* at Col. 1, lines 45-48; and Claim 21, Column 20, lines 43-61. IV also argues that the patentee was providing a solution to an existing problem, as stated *supra* pages 13-14, 17-21, the multitude of different document formats with XML syntax, the need of a business to have a compatibility programming solution to work with the XML data provided them, and to have the information understood by a non-IT specialist. The system expressly provides this solution by creating “dynamic documents” based on “management record types” (referred to as “MRTs”) and “primary record types (referred to as “PRTs”). *See* Claim 21, Col. 20, lines 43-61.

Moreover, IV argues, that this patent is not analogous to the *Alice* fact pattern, where the patent does nothing more than instruct the practitioner to perform a generic idea on a generic computer. “[The ‘081 Patent] does not say, for instance, make XML documents compatible, and

do it on a computer.” IV’s Opening Brief at 25. IV also takes issue with Capital One’s argument that “XML” is some generic field of use restriction, IV’s Reply Brief at 20-21, as XML is not divisible from the invention itself; it is part and parcel of the key inventive concept.

Again, here, the Special Master is persuaded by Plaintiffs’ argument, as Capital One does not properly focus on all of the language of the claims and the actual invention described in the patent. We agree with the Federal Circuit that it is sometimes difficult to discern when the limitations add “significantly more” to the claims, *DDR, 773 F.3d at 1255*, as is evidenced by the plethora of decisions that have been rendered post-*Alice*. But this is not one of those circumstances.

Here, the claimed invention of the ’081 Patent clearly identifies and solves a unique problem in computer technology presented by the many different XML documents in use across many different businesses enabling a business user to transcend them. The following excerpt from the patent is illustrative:

While XML formats are convenient for the company that creates them, the partners of that company may find them incompatible with their own XML formats, relational database schemes, and message formats and therefore difficult to work with. In many cases, the user is forced to have programmer create a program to merge, filter and transform XML documents into the format they want. Thus, XML documents are very difficult for the businessperson or non-technical user to operate. Therefore, there is a need for a system that both 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 37-48.

As noted in detail *supra* pages 13-14, 17-21, and hereby incorporated by reference, the claims of the ’081 Patent are directed to a system that solves a unique problem in the computer field allowing the business user dynamic access to varying types of business documents formatted in various types of specialized, computer language syntax. As was the case in *DDR*,

“the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” *DDR*, 773 F.3d at 1257 (emphasis added). Moreover, the Special Master also concludes that the ‘081 patentee was *not* trying to monopolize or preempt some abstract idea, particularly because, as noted above, there is no abstract idea like data storage. Here, like *DDR*, the patentee instead came up with an inventive way to resolve a particular computer-based problem. *Id.* at 1259.

In light of the foregoing, the Special Master recommends judgment that the ‘081 patent is patent eligible under 35 U.S.C. § 101 as the disclosed and claimed invention is not drawn to an abstract idea.

Further, although not necessary in view of the conclusion that the ‘081 Patent is not drawn to an abstract idea, the disclosed and claimed invention also solved a problem specific and unique to the computer field and is not preemptive.

Accordingly, it is recommended that the Court deny Capital One’s Motion for Summary Judgment as to the ‘081 Patent, and grant Plaintiffs’ Cross-Motion for Partial Summary Judgment as to the ‘081 Patent.

B. The ‘002 Patent

The ‘002 Patent discloses and claims an invention for “dynamically access[ing] programs, applications, bookmarked URLs, IP addresses, telephone numbers, television channels, radio stations, user profiles, and the like that are specific to a user via any computer type device.” *The ‘002 Patent*: Abstract (cover page). As stated in the “Field of Invention” section, “[t]he present invention relates generally to the field of computer networks.” *‘002 Patent*, col. 1, lines 7-10. The ‘002 patent addresses problems faced by users who wish to access their files, programs, and the like from any one of their multiple devices or computers. For example, the Patent notes:

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. Additionally, the '002 Patent states, “menu bar information and configuration for a particular user is limited to the personal computer on which the configuration and pointer information reside,” therefore, “a user using a different personal computer cannot dynamically recreate the configuration and pointer information stored on another personal computer.” '002 Patent, col. 1, lines 53-58.

Thus, the '002 Patent concludes that it “is highly desirable” to have “the ability to dynamically access any software programs, files, documents, URL bookmarks, IP addresses, telephone numbers, television channels, radio stations, and the like from any computer.” '002 Patent, Col. 3, lines 57-60.

The invention described and claimed in the '002 Patent purports to solve these problems through the use of a “mobile interface” that permits the user to access her resources from any location or any device. According to Plaintiffs’ proposed construction of “mobile interface,” which defendants adopt for purposes of the Section 101 review, Hearing Tr. at 204-05, the “mobile interface” is a “user interface accessible on different computing devices and capable of dynamically accessing user specific data stored on a network server and local device.” *Doc. 202*, Joint Claim Construction Statement at Exhibit D at 1.

Plaintiffs assert claims 9, 11, 34, and 37. Claims 11 and 34 are independent claims, and claim 9 depends from claim 1 and claim 37 depends from claim 34. IV Ltr. Brief at 2. Capital One states that Claim 9 is representative of all of the asserted claims for the *Alice* analysis, but that Claims 34 and 37 fail for the independent reason under Section 101 of not falling with the

four statutorily-protected categories of process, machine, manufacture or composition of matter.

Capital One Ltr. Brf. at 3. Plaintiffs state that Claims 34 and 37 fall within “the machine or manufacture” categories Section 101. IV’s Opening Brief at 31.

The claims at issue are as follows:

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.

'002 Patent, col. 17, lines 10-21, 46-49, 54-67; col. 19 line 19-28, 36-39 (emphasis supplied for purposes of the analysis below).

1. Threshold Issue: Do Claims 34 and 37 Fall Within Any of the Four Categories of Patent Eligible Inventions in Section 101?

Before consideration of the Section 101 *Alice/Mayo* two-step test, the Special Master addresses Capital One's assertion that since both claims 34 and 37 are drawn to a "mobile interface" with a "plurality of pointers," those claims do not pertain to a "process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" as required by 35 U.S.C. § 101. Capital One's Opening Brief at 28.

Capital One states that the interface is not purporting to be a "process," and it cannot be a "machine, manufacture or composition of matter" because it does not exist in a physical or tangible form. *Id.* at 28-29. Capital One likens the "mobile interface" with a "plurality of pointers" to the "device profile" held as falling outside the four categories in *Digitech Image Techs., LLC v. Electronics for Imaging, Inc.*, 758 F.3d 1344 (Fed. Cir. 2014). At oral argument, Capital One asserted that claims 34 and 37 are simply "directed at data." Hearing Tr. at 290.

Plaintiffs disagree with Defendants' analysis, and argue that the mobile interface is in fact a tangible invention — "it is a user interface (implemented by software) that is embodied in a tangible medium (e.g., a PDA or other computing device with input and output devices) and directly and necessarily tied to computing devices." *See* IV's Opening Brief at 30. Further, plaintiffs explain it can be perceived, interacted with, and it is directly tied to a machine. *Id.*; *see also* Hearing Tr. at 300-01 (explaining IV's position that the mobile interface can be perceived

“visually” and there is also “a touchscreen embodiment”). It also cites *Digitech* for the proposition that “software embodied in a tangible medium is a machine.” IV’s Reply Brief at 23.

After consideration of the patent, its asserted claims, the briefs, and the hearing transcript, the Special Master agrees with Plaintiffs that the claimed “mobile interface” is sufficiently tangible to fall within the machine or manufacture categories of Section 101.

Significantly, as noted *supra*, under plaintiffs’ proposed claim construction of “mobile interface,” which Capital One adopts for purposes of the Section 101 review, Hearing Tr. at 204-05, the claimed “mobile interface” is a “***user interface accessible on different computing devices and capable of dynamically accessing user specific data stored on a network server and local device.***” Doc. 202, Exhibit D at 1 (emphasis supplied). First, it is clear from this adopted construction of the term that the “user interface” connects the “computing device[s]” with the “user” seeking to access their “specific data” stored on a network server and local device. As the term “user interface” suggests, its essential purpose is *to promote direct interaction with the user*. Second, it is also clear that the part of the adopted construction regarding the mobile interface’s “capab[ility] of dynamically accessing user specific data stored on a network server and local device,” means that the mobile interface necessarily includes software. This understanding is further supported by the express language of Claims 34 and 37, which specify that the mobile interface can be displayed on and the selection code executed by any user device. *See, e.g.*, Claim 34 (which is incorporated in its entirety in Claim 37) (italics added) (col. 19 line 19-28, 36-39)(“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*”). Accordingly, the

characteristics of the mobile interface – its basic, interactive connection to the user and the user’s devices and its software capabilities -- are sufficiently tangible within the meaning of § 101.

The Federal Circuit’s decision in *Digitech*, heavily relied on by Capital One, does not dictate a different result. In *Digitech*, the Federal Circuit held that a “device profile” which was specifically recited in the claims as “comprising . . . first data [color-related data]. . . and second data [spatial-related data]” represented “[d]ata in its ethereal, non-physical form” and constituted simply “information” falling outside of the eligible subject matter under section 101. *Digitech*, 758 F.3d at 1349-50. Further, the court specifically rejected the plaintiffs’ argument that these mere data sets constituted "hardware or software within a digital image processing system" because that argument was clearly not supported by the claim language, which was directed solely to data sets. *Id.* The facts of *Digitech* are inapposite – as set forth above, the mobile interface is not mere “ethereal” data or information, it is directly connected to the user and the user’s devices and necessarily implements software.

Accordingly, the Special Master concludes that the claimed invention, which includes the “mobile interface” in Claims 34 and 37 is directly interactive with the user and the user’s devices and implements software embodied in a tangible medium and thus constitutes a machine or manufacture under 35 U.S.C. § 101. Therefore, the Special Master recommends that the Court deny Capital One’s Motion for Summary Judgment to the extent that it urges claims 34 and 37 are not directed to any of the four categories set forth in 35 U.S.C. § 101.

2. Step One of *Alice/Mayo* Test: Is the invention as claimed directed to an “abstract idea”?

Capital One further argues that claims 9, 11, 34 and 37 embody the abstract idea of “retrieving user-specific information using pointers . . . and that it is both the object and primary action of the alleged invention as claimed.” Capital One Ltr. Brief at 3. It further argues that idea is “akin to the age old concept of calling home to have a family member look up something

in a file,” Capital One Reply Brief at 2, and that it simply describes a way for a “user to access his or her information.” Capital One also analogizes to the “use of indexes . . . and filing system . . . and if necessary, have an assistant retrieve a file at another location.” *Id.* at 30.

Plaintiffs, however, state that the claimed invention is directed to “using ‘pointer data’ to be able to access files and data through the novel ‘mobile interface’ that is accessible from any location or device, no matter what platform hosts the files.” IV’s Ltr. Brief at 3. Plaintiffs further argue that Capital One’s overgeneralization flies in the face of the patent itself:

The patent disclaims any basis for Capital One’s read saying that it is for a software interface to “dynamically access programs, applications, bookmarked URLs . . . and the like that are specific to a user via any computer device.” ‘002 Abstract. The claims require this same functionality. *See, e.g.* claim 1 [upon which asserted Claim 9 depends] (requiring a “local device or a network server,” and a mobile interface” that can access with the remote and local computer devices using “pointers.” A human assistant is not a mobile interface. A physical filing cabinet is not a remote computer or network server. A piece of paper in a folder is not user specific computer resources and information. Even Capital One’s contrived scenario cannot account for providing the requested files to the user “using any computer from any geographical location.”

IV’s Reply Brief at 21.

After review of the patent and the asserted claims, the briefs, and the hearing transcript, the Special Master agrees with the Plaintiffs that Capital One’s characterization of the idea embodied by the ‘002 patent misconstrues the claims. In particular, it ignores the claims’ use of the “mobile interface” as a key and integral aspect of the claimed invention, as well as the other verbiage in the claims. *See supra* at 26-29. Also, the plain language of the claims features the mobile interface; it is an important and integral subject in Claims 1, 9, 11, 34 and 37, and is mentioned *four* times in Claim 1, *two* times in Claim 9, *four* times in Claim 11, *three* times in Claim 34, and *once* in Claim 37. Additionally, Claim 1, which is incorporated by reference in asserted claim 9, highlights a method whereby a mobile interface is retrieved to the local device

from a network server and mediates the user selections and information retrieval process; Claim 9 is dependent on Claim 1, adding that the mobile interface is retrieved via a cellular network; Claim 11 recites a method of displaying, updating, and retrieving the mobile interface from any local device or network server, and Claims 34 and 37 recite that the mobile interface can be retrieved to any device the user may have. *See* '002 Patent, col. 17, lines 10-21, 46-49, 54-67; col. 19 line 19-28, 36-39.

Additionally, Capital One's arguments are not persuasive because they are based on analogies inappropriate to the '002 patent and the asserted claims. Calling home to have a family member look up something in a phone book, kitchen drawer, or posting on the refrigerator is not analogous to a dynamic mobile interface that provides an ability to access files from anywhere from any device no matter where those e-files are located. Likewise, Capital One's suggestion that the patent only describes an indexing system that points to where records are kept in a filing stops too short. An index (such as the card catalog at a library) contains pointers to information (the books stored in a systematic manner), but the similarity ends there. Those pointers are designed to direct the user to the location of the information (the location of the book on the shelf), while a mobile interface with a programming pointer-based retrieval technique specifies certain choices and contains the code to execute the choice made by the user.

In light of the foregoing, the Special Master recommends the conclusion that the '002 patent is not abstract as it does not embody a mere abstract idea such as intermediated settlement, hedging, algorithms, and the like, and that alone is determinative and supports denial of Capital One's Motion for Summary Judgment under 35 U.S.C. § 101 as to the '002 Patent and the granting of Plaintiffs' Motion for Partial Summary Judgment.

3. Step Two of the Alice/Mayo Test: Inventive Concept?

Notwithstanding the conclusion *supra* that the '002 Patent is not drawn to an abstract idea which by itself is determinative of the Section 101 issue concerning that patent, for purposes of

completing the legal review, the Special Master addresses the parties' arguments made in conjunction with step two of the *Alice/Mayo* test.

Capital One encapsulates its argument that there is no inventive concept in the '002 Patent in its Letter Brief:

The remaining claim limitations consist of conceptually-claimed elements (e.g., "mobile interface"), generic and conventional computing limitations (e.g., displaying the mobile interface on a device, using "pointers"), and—at most—a limitation to a particular technological environment (e.g., "pointers," local device, network server). These conventional components perform their usual computing functions and do not, either individually or combined with the abstract idea, result in an inventive concept. Moreover, the claims do not specify what a "mobile interface" is, how it works, or how it carries out or contributes to the abstract idea. It is merely a conceptual addendum to the abstract idea.

Id. at 3. Plaintiffs argue in response that the '002 patent solves a problem of how to access one's computer files from any location and any device, no matter what platform hosts those files.

It meaningfully improves the functioning of the computer by allowing users to access their files irrespective of the device and affects an improvement in computer network technology by allowing files of various platforms to be accessible remotely from any location. It provides a better way to access and manage files and is inextricably tied with computer technology.

IV's Ltr. Brief at 4; *see also* Hearing Tr. at 303, line 16-304, line 2 ("This is a mobile interface. It's necessarily part of the computer system and it's distinguished from prior interfaces where it was device dependent. Now, you have that same one stop shop for all your information, be it remote or local, in one spot and it's independent of operating system. It's independent of the device . . . and that's the ingenuity of this invention.").

Essentially, the parties' dispute is whether the limitations are generic *versus* whether the limitations are a means to a "new and useful" end under Section 101. While the Special Master agrees with Capital One that the general use of pointers may be generic, as evidenced by the Background Section of the '002 Patent, the Special Master agrees with Plaintiffs that *this patent*

purports to do “significantly more.” Alice, 134 S. Ct. at 2357, 2360; *Mayo*, 132 S. Ct. at 1297-1298 (analyzing step two in terms of whether there is “enough” in the claims to transform an abstract idea into a patent-eligible invention).

The Special Master finds that the claimed invention allows user access to its files irrespective of the device and allows files of various platforms to be accessible remotely from any location as explained in detail in the patent. In short, the “mobile interface” in the invention provides a “new and useful” means to operate a pointer retrieval system and extends the ability to use such a system to any device. *See* 35 U.S.C. § 101.

The Special Master further finds that the claimed invention of the ’002 Patent clearly identifies and solves problems unique to the computer networks field involving access to multiple types of information, documentation, programs and links from multiple locations and devices.

In this regard, the ’002 Patent describes several problems the patent was directed toward solving:

The “Start” menu bar's main function is to provide easy access to commonly used applications and files However, the “Start” menu bar information and configuration for a particular user is limited to the personal computer on which the configuration and pointer information reside. Hence, a user using a different personal computer cannot dynamically recreate the configuration and pointer information stored on another personal computer. Further, the menu bar does not have any intelligence about a network connected to the personal computer so a user may not receive accessibility information about pointer data that may depend on a network connection. Even further, the current Windows “Start” menu bar information cannot be accessed across multiple operating systems or platforms such as on a Macintosh computer running Mac OS or within a web browser.

. . .

Another popular and common use of a computer or PDA is to access information on the Internet. A web browser such as the Internet Explorer 4.0/5.0 (believed to be a registered Trademark of Microsoft Corp.) or Navigator (believed to be a registered Trademark of Netscape, Inc.) is loaded onto the computer or PDA so

that the user can access web sites. The web browser is also used so that the user can receive and transmit data. Because the user may visit many web sites during a given session, each web browser allows the users to store and save the addresses (URLs) of commonly visited web sites. This is done by bookmarking them. The user bookmarks commonly visited web sites so that the user can create shortcuts for future use. As a result, the user does not have to type the complete URLs to access these sites.

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.

...

Currently, users may save a list of phone numbers on her personal computer's telephone directory software. Similarly, a user may go to a television guide web site and save a list of favorite television shows and times. Time and effort could be saved if the list of phone numbers were transparent to the user's telephone and the list of favorite television shows transparent and accessible to the user's television

...

Accordingly, the ability to dynamically access any software programs, files, documents, URL bookmarks, IP addresses, telephone numbers, television channels, radio stations, and the like from any computer is highly desirable. There is a need for a system and method that can provide access to such menu items and bookmarks using any computer.⁴

⁴ The Special Master rejects Capital One's urging of this Court to ignore everything in the patents except the claims themselves. The Special Master certainly agrees that the Section 101 analysis is directed at the claims, but as stated by plaintiffs: "the claims do not exist in the vacuum, they are informed by intrinsic evidence." IV's Reply at 21 (pointing out that the Federal Circuit in *DDR*, 773 F.3d at 1254, did examine intrinsic evidence as part and parcel of its decision). Capital One even acknowledged at the April 16, 2015 hearing that the Court must look at "intrinsic evidence" to "understand the meaning of the document." Hearing Tr. at 203.

'002 Patent, col. 1, line 48-col. 3, line 63. The patent itself explains the significant and specific concepts underlying the invention – and the mobile interface and the methods using that interface are central to the invention and are the “new and useful” (35 U.S.C. § 101) transformative aspects to any generic pointer system. Not only does the ruling squarely fit within the language of the Federal Circuit in *DDR*, 773 F.3d at 1257, *i.e.*, that “*the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks,*” it is consistent with the underlying purpose of our patent laws (and in particular the expressly intended breadth of Section 101) to promote and encourage innovative “new and useful” inventions.

Moreover, the patentee’s use of the mobile interface to achieve the goal of its invention was found above not to be an abstract idea. Accordingly, it is not an attempt to “monopolize” or preempt any abstract idea. To the contrary, it is an inventive way to access multiple types of information, documentation, programs and links from multiple locations and devices, a problem particular to computer networks. *See DDR*, 773 F.3d at 1259.

Accordingly, the Special Master recommends that the Court find that claims 1, 9, 11, 34 and 37 constitute “significantly more” than an abstract idea, and represent an “inventive concept” as that term has been interpreted under Section 101.

In light of the foregoing, the Special Master recommends that the Court find that claims 34 and 37 of the ’002 are drawn to a tangible invention and thus are patent eligible under 35 U.S.C. § 101;

That the ’002 Patent is patent eligible under 35 U.S.C. § 101 as the disclosed and claimed invention is not drawn to an abstract idea;

Further, although not necessary in view of the conclusion that the ’002 Patent is not drawn to an abstract idea, the disclosed and claimed invention also solved a problem specific and unique to the computer network field and is not preemptive.

Accordingly, it is recommended that the Court deny Capital One's Motion for Summary Judgment with respect to the '002 Patent and grant Plaintiffs' Motion for Partial Summary Judgment with respect to the '002 Patent.

IV. Conclusion

In light of the foregoing, the Special Master recommends to the Court that Defendants' Motion for Summary Judgment on the issue of patent invalidity of the '081 and '002 patents be **DENIED**, and that Plaintiffs' cross-motion for summary judgment on eligibility under 35 U.S.C. Section 101 be **GRANTED**.

Nothing in this Report and Recommendation shall be construed as binding on issues pertaining to claim construction and other non-Section 101 invalidity issues, including those set forth in 35 U.S.C. Section 102 and 103.

Pursuant to Doc. 157, the parties have until **May 26, 2015** to file any written objections to the findings, conclusions, and recommendations contained in this report.

May 12, 2015

/s/Raphael V. Lupo, Special Master