

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF VIRGINIA  
Alexandria Division

INTELLECTUAL VENTURES I LLC, )  
*et al.*, )  
 )  
 Plaintiffs, )  
 v. )  
 )  
 CAPITAL ONE FINANCIAL )  
 CORPORATION, *et al.*, )  
 )  
 Defendants. )  
\_\_\_\_\_ )

Civil Action No. 1:13-cv-00740 (AJT/TRJ)

**MEMORANDUM OPINION**

Before the Court is defendants’ Motion for Summary Judgment [Doc. No. 239] (the “Motion”), upon which the Court held a hearing on April 2, 2014, following which the Court took the motion under advisement. Upon consideration of the Motion, the memoranda and exhibits filed in support thereof and in opposition thereto, and the arguments of counsel at the hearing held on April 2, 2014, and for the following reasons, the Motion will be GRANTED and this matter DISMISSED.

**Background**

On June 19, 2013, Intellectual Ventures I, LLC and Intellectual Ventures II, LLC (collectively referred to as “IV”) brought suit against Capital One Financial Corporation and certain of its affiliated entities (collectively referred to as “Capital One”), claiming that Capital One infringed four of its patents, of which only two remain at issue in the present litigation: (1) U.S. Patent No. 7,603,382, entitled “Advanced Internet Interface Providing User Display Access of Customized Webpages” (“the ’382 Patent”); and (2) U.S. Patent No. 8,083,137, entitled “Administration of Financial Accounts” (“the ’137 Patent”). On December 18, 2013, the Court

issued its Claim Construction Order [Doc. No. 162], and on February 28, 2014, Capital One filed its Motion for Summary Judgment [Doc. No. 239] presently before the Court.

### Analysis

#### I. Patentability Under 35 U.S.C. § 101

Capital One contends that both patents consist of unpatentable subject matter under Section 101. Accordingly, Capital One's position, which is "based on a challenge to the eligibility of the subject matter[,] must be proven by clear and convincing evidence." *CLS Bank Int'l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1304-05 (Fed. Cir. 2013), *cert. granted*, 134 S. Ct. 734, 187 L. Ed. 2d 590 (U.S. 2013).

As to the '137 Patent, IV asserts Claims 5, 6, 7, 8, 9, 10, and 11 of the '137 Patent, of which Claim 5 is the independent claim upon which the remaining claims are dependent.<sup>1</sup> The claimed invention, in essence, utilizes user-selected pre-set limits on spending that are stored in a database that, when reached, communicates a notification to the user via a device.<sup>2</sup> Claim 5 of the '137 Patent reads:

A method for:

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<sup>1</sup> Plaintiff conceded at the hearing held on April 2, 2014 that the subject matter patentability of all of its claims under Section 101 rises or falls based on the patentability of independent Claim 5.

<sup>2</sup> The Summary of the invention states, in part, that it is "a system and method which allows consumer users to establish self-imposed limits on the user's spending (borrowing) such that when the limit is reached the consuming user is notified. This notification can be before, during or after the point-of-sale transaction, and can be delivered, if desired, by the account clearing network and printed on the users purchase receipt. The notification message can be delivered via a phone call, email or over an Internet connection to the user. The notification can be to one or more designated third parties, such as a parent, card owner, or a debt counselor." '137 Patent at 1:65-2:8.

storing, in a database, a profile keyed to a user identity and containing one or more user-selected categories to track transactions associated with said user identity, wherein individual user-selected categories include a user pre-set limit; and causing communication, over a communication medium and to a receiving device, of transaction summary data in the database for at least one of the one or more user-selected categories, said transaction data containing said at least one user-selected category's user pre-set limit.

'137 Patent at 10:4-15.

Capital One argues that the '137 Patent covers simply the abstract idea of basic budgeting, whereby a user categorizes transactions and establishes limits on the charges he or she desires for those categories. IV argues that the '137 Patent is not simply an abstract idea, but rather "cover[s] a specific patent eligible application of database technology for electronically administering financial accounts." Mem. in Op. at 7.<sup>3</sup> In support of this position, IV points out that, "[i]n accord with the claimed implementation, there must be a database that integrates profile data keyed to a user identi[t]y and transaction summary data that is then communicated to a device." Mem. in Op. at 8.

As to the '382 Patent, IV asserts Claims 1-5, 16, 17, 19, and 20-22 of the '382 Patent, with the independent claims being 1, 16 and 21. The invention is summarized in the Patent as "a system for delivering information from an information provider to an information user that is selectively tailored toward the capabilities of the information provider and the needs of the information user." '382 Patent at 2:1-6.<sup>4</sup>

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<sup>3</sup> In its Background section, the '137 Patent describes the problem to be solved as, essentially, the inability of people to keep track of their spending on a real-time basis, especially those who, because of their spending habits, are suffering from personal financial difficulties and distress, and thus should be on strict budgets. *See* '137 Patent at 1:18-47.

<sup>4</sup> The Summary continues:

Claim 1 is the independent system claim of the '382 Patent and reads:

A system for providing Web pages accessed from a Web site in a manner which presents the Web pages tailored to an individual user, comprising:

- an interactive interface configured to provide dynamic Web site navigation data to the user, the interactive interface comprising:
  - a display depicting portions of the Web site visited by the user as a function of the Web site navigation data; and
  - a display depicting portions of the Web site visited by the user as a function of the user's personal characteristics. '382 Patent at 7: 13-21.<sup>5</sup>

Claim 21 is representative of the two independent method claims asserted and reads:

A method comprising:

- receiving data from a user profile associated with a user;
- in response to a request associated with the user, sending a data stream that is selected based at least in part on the received data from the user profile; and
- displaying the data stream via an interactive interface, the interactive interface comprising:
  - a display depicting portions of a web site visited by the user as a function of web site navigation data; and
  - a display depicting portions of the web site visited by the user based at least in part on the received data from the user profile.

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The system includes an interactive interface which provides a medium for information users to communicate with information providers. More specifically, the system includes means for the information user to tailor the profile of the information user depending upon the needs or desires of the information user. Separate means permit the information provider to view this information user profile and to structure the information seen by the information user in a format that is most suitable to that information user.

The system also enables the information user to operatively tailor their profile on a real time basis. Thus, the information provider may tailor the information provided to the Internet using community depending upon the time of day, business conditions or other factors.

Accordingly, it is an object of the present invention to provide an advanced Internet interface between Internet information users and Internet information providers.

*Id.* at 2:6-23.

<sup>5</sup> Dependent Claims 2-5 add detail and additional functions to the system in Claim 1. *Id.* at 7:22-47.

*Id.* at 8:43-54.

Claim 16, the other independent method claim, adds a “storing” step to Claim 21. *Id.* at 8:17-32.<sup>6</sup>

As with the ‘137 Patent above, Capital One argues that the ‘382 Patent claims an unpatentable abstract idea. In particular, Capital One claims that the asserted claims cover the abstract idea of “personalizing a website display to reflect a user’s characteristics and navigation history.” Mem. in Sup. at 13. It also contends that the claims do not sufficiently apply this idea through any specific machine, but rather simply incorporate generic components that store, transmit, or display various types of information. According to Capital One, IV identifies many different structures that *could* form the interactive interface, but all of which are generic computer components and none of which IV could say for certain makes up the interactive interface or is required.

IV argues in response that this Court’s construction of “interactive interface” confirms that the ‘382 Patent’s limitations are concrete. IV also argues that the process by which the information is stored, transmitted and displayed transforms the information and also that the claimed components are a particular machine, such that the ‘382 Patent survives the machine-or-transformation test. In terms of “concrete limitations,” IV points in particular to its Claims 1, 16 and 21, which include (1) an “interactive interface;” (2) “dynamic web site navigation data” that is provided “to the user;” (3) “a display that depicts portions of the web site visited by the user as a function” either of “the website navigation data” or “the user’s personal characteristics;” (4) “user profile attributes;” and (5) “data stream[s].” Mem. in Op. at 10. IV argues further that

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<sup>6</sup> The asserted dependent method claims add focus and detail to some aspects of the basic idea. *See, e.g.*, Claims 17, 19, 20 (adding different types of profiles) and Claim 22 (adding personalization of a coupon)). *Id.* at 8:33-35, 8:38-40, 8:41-42, and 8:55-59.

these limitations sufficiently limit the claims to specific applications of web page technology and, even more narrowly, to specific applications of customized web page technology.

Applying the holdings and reasoning of *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 182 L. Ed. 2d 321 (2012), *Parker v. Flook*, 437 U.S. 584, 98 S. Ct. 2522, 57 L. Ed. 2d 451 (1978), *Bilski v. Kappos*, 130 S. Ct. 3218, 177 L. Ed. 2d 792 (2010) and *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366 (Fed. Cir. 2011), the Court concludes as a matter of law, based on a clear and convincing evidence, that neither the '137 nor the '382 patent contains patentable subject matter under Section 101. Neither satisfies either prong of the "machine-or-transformation" test nor otherwise contains a "patentable process," as that term is defined in § 100(b) or as established by the "guideposts" provided by Supreme Court precedents. *See Bilsky*, 130 S. Ct. at 3231 ("The Court, therefore, need not define further what constitutes a patentable 'process,' beyond pointing to the definition of that term provided in § 100(b) and looking to the guideposts in *Benson*, *Flook*, and *Diehr*."). Nothing in the Court's Claim Construction establishes patentability since, however the claim terms may be construed, each patent consists of nothing more than the entry of data into a computer database, the breakdown and organization of that entered data according to some criteria, disclosed in the '137 patent, but not in the '382 patent, and the transmission of information derived from that entered data to a computer user, all through the use of conventional computer components, such as a database and processors, operating in a conventional manner.<sup>7</sup> There is no inventive technology or other inventive concept that authorizes the protections of a patent, such as an improvement in

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<sup>7</sup> Even were software patentable, there is no attempt in either patent to patent specific software that implements the described functions. In fact, the "web-site manager" of the '137 Patent, which IV has described as "software," is not part of the claimed invention, as stated in the specific claims.

the workings of the computer or the transmissibility of data or some other transformation of data into something qualitatively beyond the informational content of the data entered, even though the data might be organized and manipulated to disclose useful correlations. Rather, these patents are “drawn to a mental process – i.e., an abstract idea,” *Cybersource*, 654 F.3d at 1374, and the patents simply do not “add enough” by way of the disclosed applications of these abstract ideas, *see Mayo*, 132 S. Ct. at 1297 (“To put the matter more precisely, *do the patent claims add enough* to their statements of the correlations to allow the processes they describe to qualify as patent-eligible processes....”) (emphasis added).

There also is nothing in the “postsolution activity” that reflects the patentability of any specific applications of these abstract ideas. *See id.* at 1301. At most, the patents describe a more efficient system or method for performing tasks than could be done without a computer, i.e., monitoring expenditures according to preset limits (the ‘137 Patent), or determining what would appeal to a particular user from a particular website (the ‘382 Patent). In short, this is nothing more than “the mere manipulation or reorganization of data.” *See CyberSource* at 1375 (“The mere manipulation or reorganization of data, however, does not satisfy the transformation prong.”); *see also Flook*, 437 U.S. at 591, (“The process itself, not merely the mathematical algorithm, *must be new and useful.*”) (emphasis added).

## **II. Indefiniteness under § 112(b) as to the ‘382 Patent.**

Capital One also argues that Claim 5, and its dependent claims, fail to satisfy the requirements of Title 35 U.S.C. § 112(b). That statute requires that every patent's specification “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” Thus, a claim may be invalid for indefiniteness where the claim language is so standardless that it cannot be meaningfully applied.

“The primary purpose of the definiteness requirement is to ensure that the claims are written in such a way that they give notice to the public of the extent of the legal protection afforded by the patent, so that interested members of the public, *e.g.*, competitors of the patent owner, can determine whether or not they infringe.” *All Dental Prodx, Inc. v. Advantage Dental Prods., Inc.*, 309 F.3d 774, 779 (Fed. Cir. 2002). Indefiniteness is a question of law. *Atmel Corp. v. Information Storage Devices, Inc.*, 198 F.3d 1374, 1378 (Fed. Cir. 1999). Because there is a presumption that patents are valid, an alleged infringer asserting that a claim term is indefinite must so prove by clear and convincing evidence. *See Bancorp Servs., LLC v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1371 (Fed. Cir. 2004). “Only claims not amenable to construction or insolubly ambiguous are indefinite.” *Source Search Tech., LLC v. LendingTree, LLC*, 588 F.3d 1063, 1076 (Fed. Cir. 2009). A claim satisfies the definiteness requirement of § 112 “[i]f one skilled in the art would understand the bounds of the claim when read in light of the specification.” *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001).

At issue is whether the term “interactive interface,” as construed by the Court, and the dependent “Display Terms” terms (which all incorporate the “interactive interface” term), fail to meet the definiteness requirement of § 112(b) because the term “interactive interface” in Claim 1 is insolubly ambiguous. The Court has construed “interactive interface” as “a *selectively tailored medium* by which a web site user communicates with a web site information provider.” Doc. No. 162 at 5 (emphasis added).<sup>8</sup>

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<sup>8</sup> IV proposed that “interactive interface” be construed as an “*advanced* selectively tailored medium by which a web site user communicates with a web site information provider.” In essence, the Court adopted IV’s proposed construction of “interactive interface,” with the exception of the word “advanced.”

Having reviewed the record, including the declarations and testimony of both IV's and Capital One's experts, the Court finds and concludes as a matter of law, based on clear and convincing evidence, that the '382 Patent fails for indefiniteness and is therefore unenforceable. More specifically, the '382 Patent does not disclose to someone of ordinary skill in the art enough information to understand what an "interactive interface" is in fact. IV's experts have said variously what a "selectively tailored medium" could be, but cannot say definitively what it is or is not. Similarly, nothing in the Court's construction of "interactive interface," the '382 patent's claim language, or the '382 Patent's specification more generally provides any guidance on what the "medium" is, how it is or even could be "selectively tailored," or how (if at all) the selective tailoring relates to communication between web site users and web site information providers as the patent requires. Thus, it is difficult to know whether a "selectively tailored medium" has any specific structure or scope and neither the public nor a person of ordinary skill in the art could reasonably determine the precise metes and bounds of the claimed invention.<sup>9</sup>

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<sup>9</sup> IV argues that, since the Court was able to construe "interactive interface," this should "foreclose the issue." Mem. in Op. at 24. "Claims are considered indefinite when they [1] are not amenable to construction or [2] are insolubly ambiguous." *Young v. Lumenis, Inc.*, 492 F.3d 1336, 1346 (Fed. Cir. 2007). In this regard, courts recognize that while it will often make sense to decide whether claims are indefinite at the claim construction phase, it is possible for the district court to determine that a claim is amenable to construction at the *Markman* hearing, but then later determine that the claim is nevertheless insolubly ambiguous, i.e., does not adequately delimit the bounds of the claimed invention. *See Biosig Instruments, Inc. v. Nautilus, Inc.*, 715 F.3d 891, 898-899 (Fed. Cir. 2013), *cert. granted*, 134 S. Ct. 896, 187 L. Ed. 2d 702 (U.S. 2014) ("In and of itself, a reduction of the meaning of a claim term into words is not dispositive of whether the term is definite.... And if reasonable efforts at claim construction result in a definition that does not provide sufficient particularity and clarity to inform skilled artisans of the bounds of the claim, the claim is insolubly ambiguous and invalid for indefiniteness." (quoting *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1371 (Fed. Cir. 2008))). Here, the Court essentially adopted IV's construction of "interactive interface" in its Claim Construction Order [Doc. No. 162] and now proceeds to consider the second prong of the

IV argues that the '382 Patent contains sufficient "definiteness" based on a number of contentions, including (1) that the structure associated with the "Internet interface" applies to the "interactive interface," which the Court found was part of the "Internet interface;" (2) that there are "database structures...that are used to selectively tailor content provided by a web site information provider...[;]" (3) that structure is inherent in the word medium itself; and (4) that the "medium" actually refers to software. Doc. No. 226 at 14-15.<sup>10</sup> None of these contentions provides sufficient definition to what the "medium" is.<sup>11</sup> The Court therefore finds that the term "medium" is insolubly ambiguous.

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indefiniteness analysis. For these reasons, the Court rejects IV's position that the Court's claims construction forecloses a challenge for indefiniteness.

<sup>10</sup> At the summary judgment hearing, IV conceded that there is no hardware limitation that specifies a particular kind of computer or a particular kind of web server, but rather argued that the "selectively tailored medium" is provided by the software that provides the selectively tailored content and that the web page manager is an example of the special software that provides the tailoring.

<sup>11</sup> For example, even if the "Internet interface" had a sufficiently identified structure, simply saying that the "interactive interface" is part of the Internet interface says nothing about what the interactive interface is, and in fact makes both the interactive interface and the Internet interface ambiguous, as the Internet interface would contain an insolubly ambiguous component. Similarly, while database structures are a necessary component of the invention, have "structure," and are "*associated with* the 'selectively tailored medium,'" as IV contends, there is no indication that the "database structures" are part of the interactive interface itself or a necessary part of it. Doc. No. 226 at 15. In fact, they are simply associated structures that are necessary for the theoretical functioning of the invention because databases would be necessary to store the profiles for future use in "selectively tailoring" the displayed content in the "interactive interface;" they do not appear to perform any aspect of the selective tailoring function as IV appears to argue. Likewise, even if the Court were to accept that "structure" is inherent in a "medium," the '382 Patent provides no description whatsoever of what that structural element might actually be in this context. The only description of any structural elements relates to the "interface" description in the prior art. *See* '382 Patent at 2:54-3:3. How this prior art relates to the "interactive interface" is wholly unclear, and no limits on such structures are presented as to the "interactive interface" in the '382 Patent's claims. Finally, based on the claims and the specifications, the Court rejects any contention that the web page

Likewise problematic is that the specification fails to disclose any “tailoring” of any medium or how any such tailoring is at all “selective.” The phrase “selectively tailored” appears in the ‘382 Patent as a term descriptive not of “medium, but of “information,” “Internet interface,” “profiles,” and “data streams.” See ‘382 Patent at 1:17-19 (“the invention pertains to a system for *selectively tailoring* information delivered to an Internet user depending upon the particular needs of the user”); *id.* at 2:1-6 (“[t]he present invention is a system for delivering information from an information provider to an information user that is *selectively tailored* toward the capabilities of the information provider and the needs of the information user”); *id.* at 3:40-42 (“[t]he system 9 of the present invention for providing an advanced, *selectively tailored* Internet interface is shown in FIG. 3”);<sup>12</sup> *id.* at 4:15-18 (“[i]n accordance with the teachings of the present invention, the profiles 252A-252N are *selectively tailored* to the needs of the information user 12, 14, 16, 18 at a particular time”); *id.* at 5:55-56 (“...this data stream 323A may be *selectively tailored* in a different manner as will be described in detail hereinafter.”) (emphasis added in all). Nothing in the specification explains how any “medium” is somehow “selectively tailored.” IV argues that “a person of ordinary skill in the art would understand that the Web page manager is an example of computer software in ‘a selectively tailored medium’ that tailors Web pages to a specific individual based on his or her user profile.” IV’s Opposition to Capital One’s Motion for Judgment on the Pleadings [Doc. No. 226] at 16. Unexplained, however, is what the medium is, and since we do not know what the “medium” is, it impossible

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manager is part of the “interactive interface.” No software or any particular hardware is mentioned anywhere in the specification.

<sup>12</sup> “The system in 9” refers to the system in FIG. 3 that provides for the transmission of data from the information users and information providers to the “information transport structure.” See ‘382 Patent, FIG. 3.

to know definitively what is being “selectively tailored” or what a “selectively tailored medium” might entail. Ostensibly in support of this position, IV explains that this “selectively tailoring” is accomplished via “special software that makes the medium selectively tailored.” But again unexplained is what the medium is, how the medium itself is selectively tailored, or how any associated software, which is programmed by design at the outset to select or tailor data or information, is and continues to be, once programmed, “selectively tailored” during the described process. In other words, it would appear that, even though the software may tailor the information presented, the software itself is not “selectively tailored” based on user profiles or navigation data. Furthermore, the web page manager is not mentioned within any of the claims of the ‘382 Patent. For these reasons, the Court rejects IV’s contention that a person of ordinary skill in the art would understand that the “web page manager” is an example of “a selectively tailored medium,” or is any part thereof.

As for the Display Terms, the Court has found that “the word ‘display’ does not refer to a physical device but rather a pictorial or graphic depiction shown to the user regarding what portion of the website that user has visited,” and that, as to independent Claims 1, 16 and 21, the displays are created, in part, based on information “automatically downloaded *from the interactive interface.*” Doc. No. 162 at 6-7 (emphasis added). For the above reasons, the Court must also conclude as a matter of law that the Display Terms, as construed, are also insolubly ambiguous.

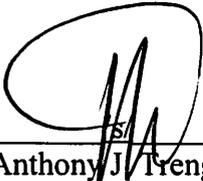
For the above reasons, the Court finds and concludes that the '382 Patent is insolubly ambiguous in violation of § 112(b), and that summary judgment in favor of Capital One is appropriate on this basis.<sup>13</sup>

### Conclusion

For the above reasons, the Court finds and concludes that there are no genuine issues of material fact as to the application of § 101 to the '137 and '382 Patents and of § 112(b) to the '382 Patent, that defendants have shown by clear and convincing evidence that the '137 Patent and the '382 Patent are invalid on the grounds that each claims unpatentable subject matter under § 101, and that, as to the '382 Patent, certain claim terms, as discussed above, are indefinite and insolubly ambiguous, rendering the '382 Patent unenforceable under § 112(b). Capital One is therefore entitled to judgment as a matter of law. Capital One's Motion for Summary Judgment [Doc. No. 239] will therefore be GRANTED and this action DISMISSED.

An appropriate Order will issue.

The Clerk is directed to forward copies of this Memorandum Opinion to all counsel of record.



Anthony J. Trenga  
United States District Judge

Alexandria, Virginia  
April 16, 2014

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<sup>13</sup> Given the Court's conclusions with respect to patentability and indefiniteness, there is no need for the Court to rule further on the remaining grounds asserted in defendants' Motion for Summary Judgment.