

United States District Court
District of Massachusetts

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Alto Dynamics, LLC,)	
)	
Plaintiff,)	
)	
v.)	
)	Civil Action No.
Wayfair LLC,)	23-11351-NMG
)	
Defendant.)	
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MEMORANDUM & ORDER

GORTON, J.

This is a patent infringement case. Plaintiff, Alto Dynamics, LLC ("Alto" or "plaintiff") is a limited liability company which holds patents pertaining to, inter alia, searching and manipulating a database, monitoring the usage patterns of users of a system, serving advertisements to users and enabling a user's access to resources. Alto has sued defendant Wayfair LLC ("Wayfair" or "defendant") for allegedly infringing nine of its patents.

Wayfair has moved to dismiss the complaint on the grounds that all of the asserted patents are directed to abstract ideas that are ineligible for patenting. See Docket No. 21. For the reasons that follow, the motion will be allowed, in part, and denied, in part.

I. Background

This action was originally filed in the Western District of Texas in August, 2022. In November, 2022, defendant moved to transfer the case to this Court which plaintiff initially opposed. After Alto filed an amended complaint in December, 2022, Wayfair moved to dismiss the claims against it pursuant to Fed. R. Civ. P. 12(b)(6). The parties conducted venue-related discovery and, in June, 2023, plaintiff assented to defendant's transfer request. The case, replete with a fully briefed motion to dismiss, was transferred to this Court in June, 2023. In August, 2023, the Court permitted plaintiff to file a short sur-reply brief in opposition to the motion to dismiss.

Alto's amended complaint alleges infringement of nine patents referred to collectively herein as "the Asserted Patents".¹ For each of the Asserted Patents, plaintiff specifically alleges infringement of only one claim and defendant contends that such claim is representative of the pertinent patent. Furthermore, in its opposition, plaintiff does not dispute that those claims are representative of its

¹ The Asserted Patents are: 1) U.S. Patent No. 6,604,100 ("the '100 Patent"), 2) U.S. Patent No. 7,152,018 ("the '018 Patent"), 3) U.S. Patent No. 7,392,160 ("the '160 Patent"), 4) U.S. Patent No. 7,657,531 ("the '531 Patent"), 5) U.S. Patent No. 8,051,098 ("the '098 Patent"), 6) U.S. Patent No. RE46,513 ("the '513 Patent"), 7) U.S. Patent No. 6,757,662 ("the '662 Patent"), 8) U.S. Patent No. 6,691,103 ("the '103 Patent") and 9) U.S. Patent No. 6,662,190 ("the '190 Patent").

patents. Nor does it identify in either its opposition or its sur-reply any other claims "that it believed would not be fairly represented". Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343, 1348 (Fed. Cir. 2014). The Court agrees that the claims identified by defendant are representative of the Asserted Patents and that other claims are "substantially similar in that they recite little more than the same abstract idea". Id. It will, therefore, consider, each of the disputed claims as representative of their respective patents.

II. Motion to Dismiss

A. Legal Standard

To survive a motion to dismiss pursuant to Fed. R. Civ. P. 12(b)(6), the complaint must contain sufficient factual matter to state a claim for relief that is actionable as a matter of law and "plausible on its face." Ashcroft v. Iqbal, 556 U.S. 662, 678 (2009) (quoting Bell Atl. Corp. v. Twombly, 550 U.S. 544, 570 (2007)). A claim is facially plausible if, after accepting as true all non-conclusory factual allegations, the court can draw the reasonable inference that the defendant is liable for the misconduct alleged. Ocasio-Hernandez v. Fortunoburset, 640 F.3d 1, 12 (1st Cir. 2011).

When rendering that determination, a court may not look beyond the facts alleged in the complaint, documents

incorporated by reference therein and facts susceptible to judicial notice. Haley v. City of Boston, 657 F.3d 39, 46 (1st Cir. 2011). A court also may not disregard properly pled factual allegations even if actual proof of those facts is improbable. Ocasio-Hernandez, 640 F.3d at 12. Rather, the relevant inquiry focuses on the reasonableness of the inference of liability that the plaintiff is asking the court to draw. Id. at 13.

Those familiar rules apply equally in the patent context, and dismissal of a claim of patent infringement on the basis that the patent is drawn to an ineligible, abstract idea is appropriate at the pleadings stage only if there are no factual allegations that prevent resolution the eligibility question as a matter of law. Aatrix Software, Inc. v. Green Shades Software, Inc., 882 F.3d 1121, 1127-28 (Fed. Cir. 2018). Although issued patents are presumed to be valid, that presumption is rebuttable. Microsoft Corp. v. i4i Ltd. Partnership, 564 U.S. 91, 97 (2011).

B. Analysis

Defendant asserts that plaintiff's claims of patent infringement must be dismissed because the subject matters of the Asserted Patents are ineligible for patenting. Wayfair contends that the patents are directed to abstract ideas, devoid

of any inventive concepts and therefore ineligible for patent protection under 35 U.S.C. § 101.

Section 101 provides that

[w]hoever 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.

Section 101 implicitly eliminates from patent eligibility “[l]aws of nature, natural phenomena, and abstract ideas”. Alice Corp. Pty. Ltd. v. CLS Bank Int’l, 573 U.S. 208, 216 (2014).

The United States Supreme Court has set forth a two-step framework to guide the inquiry into whether a patent is eligible for protection under § 101. See id. at 217; Mayo Collaborative Servs. v. Prometheus Labs., Inc., 566 U.S. 66 (2012). A patent is invalid under § 101 only if it fails both steps of the Alice inquiry. Alice, 573 U.S. at 217-18.

At the first Alice step, the Court must determine whether the claims at issue are directed to a patent-eligible concept. Id. at 218. In doing so, the Court evaluates the “focus of the claimed advance over prior art” to determine whether its “character as a whole” is directed to eligible subject matter. PersonalWeb Techs. LLC v. Google LLC, 8 F.4th 1310, 1315 (Fed. Cir. 2021) (cleaned up). With respect to software innovations, that inquiry “often turns on whether the claims focus on

specific asserted improvements in computer capabilities” rather than on a process or system that qualifies as an abstract idea and for which computers are “invoked merely as a tool”. TecSec, Inc. v. Adobe, Inc., 978 F.3d 1278, 1293 (Fed. Cir. 2020) (citations omitted).

At the second Alice step, the Court examines the elements of the claim both individually and as an ordered combination to determine whether the claim, although directed at ineligible subject matter, nevertheless contains an “inventive concept” which transforms it into a patent-eligible application. Alice, 573 U.S. at 217-18. An inventive concept must be something “significantly more” than the abstract idea itself and a patent which claims no more than the performance of well-understood, routine and conventional activities does not satisfy the second Alice step. Id.; see Aatrix, 882 F.3d at 1128.

1. Claim 1 of U.S. Patent No. '100

The '100 Patent claims:

1. A method for converting relational data from a relational database into a structured document comprising the steps of:

[a] storing a view query that defines a structured document view of the relational database, a structure of the view query being independent of a structure of data in the relational database;

[b] receiving a user query against the structured document view;

[c] forming an executable query by determining a composition of the view query and the user query;

[d] partitioning the executable query into a data extraction portion and a construction portion;

[e] transmitting the data extraction portion to the relational database;

[f] receiving at least one tuple stream from the relational database according to the data extraction portion; and

[g] merging the at least one tuple stream and the construction portion to generate a structured document, wherein the structured document view is capable of defining a document of arbitrary nesting depth.

Wayfair contends that the claim is directed to the abstract idea of converting data from a database into a document. Alto responds that claim 1 addresses a particular problem which arises in Internet and computer-based systems and is solved by a novel conversion tool described in the patent.

Furthermore, Alto relies upon the amended complaint which declares, inter alia, that:

the claims of the '100 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity.

To the extent that plaintiff relies on such conclusory assertions with respect to the '100 Patent or any of the other Asserted Patents, the Court disregards them. See Simio, LLC v. Flexsim Software Prods., 983 F.3d 1353, 1365 (Fed. Cir. 2020). In its sur-reply, Alto opines that it would be improper for the Court to disregard such assertions and cites Philips N. Am., LLC

v. Fitbit, Inc., No. 19-CV-11586-FDS, 2021 U.S. Dist. LEXIS 150080 (D. Mass. Aug. 10, 2021).

Philips does not, however, provide support for plaintiff's position. The district judge in Philips explained that specific allegations of inventiveness "tied to the claims and specification" should not be disregarded. Id. at *22. He contrasted such allegations with conclusory allegations that amount to no more than "a series of legal conclusions about the § 101 analysis" which could be disregarded. Id. (cleaned up) (citing Dropbox, Inc. v. Synchronoss Techs., Inc., 815 F. App'x 529, 538 (Fed. Cir. 2020)). That distinction succinctly explains why Alto's boilerplate allegations, which are entirely generic and conclusory, should and will be disregarded.

The Court finds that defendant has accurately described the subject matter of the '100 Patent and concludes that the claims are directed to an abstract idea. Although the patent's specification purports to limit the field of use of the invention to the context of relational databases and XML documents, at step one of the Alice framework, "[s]uch limitations do not render an otherwise abstract concept any less abstract." Intellectual Ventures I LLC v. Capital One Fin. Corp. ("Capital One"), 850 F.3d 1332, 1340.

At step two of the Alice framework, however, the Court finds that there is an issue of fact as to whether the '100

patent contains an inventive concept which renders it patent-eligible. In DDR Holdings, LLC v. Hotels.com, the Federal Circuit held that the patent claims at issue recited a patentable invention because they provided a solution to an Internet-centric problem by specifying how:

interactions with the Internet are manipulated to yield a desired result - a result that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink.

773 F.3d 1245, 1258 (Fed. Cir. 2014); see also Weisner v. Google LLC, 51 F.4th 1073, 1087-88 (Fed. Cir. 2022) (holding that patent claims may be eligible under Alice step two when they “provide[] a specific solution to an Internet-centric problem”).

The '100 patent recites a specific, allegedly unconventional method of forming an executable query which is divided into a data extraction portion (e.g. an SQL query) and a construction portion (e.g. an XML document template). The former is transmitted to the relational database and returns “at least one tuple stream” which is then merged with the latter to generate the desired document. It would be unwarranted to conclude, at this stage of the proceedings, that those steps do not constitute an inventive concept which improves upon prior methods. The '100 Patent claims something more than a “result-oriented solution, with insufficient detail for how a computer

accomplishes it[,]” held not to contain an inventive concept in Capital One. 850 F.3d at 1342.

2. Claim 1 of U.S. Patent No. '018

The '018 Patent claims:

1. A method of monitoring user usage patterns of a system, comprising the steps of:

[a] providing at least one state object, the object including a profile representative of user usage;

[b] storing the state object at a client location;

[c] passing, to a central server, the state object with each subsequent interaction initiation; and

[d] receiving, from the central server, the state object along with the response of the central server;

[i] wherein the profile is modified to reflect the interaction between the client location and the central server, by one of one or more Scripts within or included in information/resources provided to the client location by the central server, and one or more programs executed at the client location, thus precluding manipulation of the profile by the server.

At Alice step one, the Court finds that the claim is directed to the abstract idea of monitoring the usage patterns of users. The claim describes “providing”, “storing”, “passing” and “receiving” information, specifically, a state object containing a user profile. Any purported improvements provided by the patent are written in “result-oriented” and/or abstract

language and are ineligible for patenting. See, e.g., IBM v. Zillow Group, Inc., 50 F.4th 1371, 1378 (Fed. Cir. 2022). There is no improvement “specific to computing”. Id.

Turning to Alice step two, the Court concludes that the claim is comprised of conventional steps which describe the manipulation of information at a high level of generality. See Capital One, 850 F.3d at 1341 (holding that courts must “determine whether the claims do significantly more than simply describe [the] abstract method”) (quoting Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709, 715 (Fed. Cir. 2014)). Although Alto contends that the patent recites “a novel method to monitor usage patterns of a computer system” and cites to claim 1[d][i], it makes no effort to explain what is inventive. See IBM, 50 F.4th at 1379 (holding that a district court “need not accept a patent owner's conclusory allegations of inventiveness”). The “wherein” clause specifically identified by Alto is merely comprised of well-known, conventional functions with a desired result of “precluding manipulation of the profile by the server” appended to it. There is no inventive concept.

3. Claim 1 of U.S. Patent No. '160

Claim 1 of the '160 Patent is substantially similar to claim 1 of the '018 Patent. The only meaningful addition is found at claim 1[d][ii]:

wherein the central server audits the state object/profile passed to it, and performs analysis on the audited profile in order to direct services and/or information suited to the profile to the client location.

With respect to step 1 of the Alice analysis, the Court finds that the '160 Patent is also directed to the abstract idea of monitoring the usage patterns of users. As used in the patent and described in the specification, the additional "audit" and "analysis" functions are not specific actions which render the subject matter of the invention any less abstract. See In re Killian, 45 F.4th 1373, 1379-80 (Fed. Cir. 2022) (explaining that claims directed to the collection and evaluation of data which "could be performed by a person" were not patent-eligible when performed on a generic computer). Nor do those conventional functions, in isolation or in the context of the rest of the claim, supply an inventive concept which transforms the underlying abstract idea. See id. at 1380.

4. Claim 1 of the '531 Patent; Claim 1 of the '098 Patent; Claim 16 of the '513 Patent.

Defendant contends that the '531 Patent, the '098 Patent and the '513 patent are all directed to the abstract idea of verifying user identity (collectively, "the security patents"). Plaintiff disputes that conclusion but concedes that the '098 Patent and the '513 patent are "relatives" of the '531 Patent upon which it focuses its arguments. The '531 Patent claims:

1. A method of enabling access to a resource of a distributed application server or processing system by a user/client application possessing a valid security-context, comprising the steps of:

[a] receiving the security-context and an appended protected security-context renewal request provided by the user to an access authorization component of the application server or processing system;

[b] verifying the validity of the security-context and the security-context renewal request;

[c] extracting content of both the security-context and the security-context renewal request;

[d] comparing current time to an expiration time identifying time of expiration of the security-context;

[e] if the expiration time is less than the current time, comparing the security-context renewal request with stored identity and authorization information comprising at least one of a user identifier, an organization identifier, a sub-organization identifier, a key, an authentication certificate, an user location, a user role, and an user position identifying the user to the access authorization component and generating a new symmetric key, and other access and authorization information;

[f] generating an updated security-context based on the verifying of the user's identity and authorization and based on the user having requested authority for access to the resource and services;

[g] providing the updated security context to the user, and

[i] sending the updated security-context and a request for access to the resource and services by the user to the application server or processing system.

The Court concludes that the representative claims of the security patents are directed to the abstract idea of verifying user identity and enabling access to resources. Despite the number of steps in the '531 patent, it and the other security patents invoke generic computers (e.g., all three patents state that the "invention can be implemented utilizing commercially available computer systems and technology") to carry out the abstractions of "receiving", "establishing", "verifying", "comparing", "providing" and/or "sending" communications and information. The claims do not focus on a specific improvement in computer capabilities but on an abstract process (or system) implemented by using generic computer equipment. Cf. Ancora Techs. v. HTC Am., Inc., 908 F.3d 1343, 1348-1349 (Fed. Cir. 2018) (holding that a patent related to computer security was patent-eligible because it was directed to a "specific technique that departs from earlier approaches" which relied on specific and unique aspects of a computer's Basic Input Output System (BIOS)).

With respect to Alice step two, the security patents repeatedly refer to a "security context" that a user must possess in order to access a given resource. As Wayfair points out, Alto has coined a construct that suggests an inventive concept without ever providing one. See Capital One, 850 F.3d at 1341 (holding that newly coined, technical sounding data

structures “d[id] not sufficiently transform the abstract concept into a patentable invention under step two”).

For instance, in the '531 Patent, the “security context” is defined throughout the specification in generic terms (e.g. “a user’s logon information and [] system authorization information” or “logon information and authorization information that is necessary for access to the resource”). That basic construct of credentials that enable access to certain resources is combined with passive and general language which teaches that the security context “is built” or “generat[ed]” by an unspecified process. Nothing about the claimed “security context” is disclosed with the specificity necessary to supply an inventive concept that renders the security patents patentable.

Plaintiff halfheartedly suggests that an inventive concept is found somewhere else in the claims. First, Alto contends that the security patents solve the Internet-centric problem of enabling access to resources in a distributed application server or other distributed system. The claims, however, do not provide a “specific solution” that enables one to achieve a desired, unconventional result. See Weisner, 51 F.4th at 1087-88. Instead, they contain a litany of well-known, routine computer functions (e.g. receiving, verifying, comparing and sending information) arranged in a conventional order. See,

e.g., In re Killian, 45 F.4th at 1380; Content Extraction, 776 F.3d at 1347. Alto also declares that the security patents are inventive in their totality and cites conclusory allegations in the amended complaint that the '098 and '513 Patents are "not directed to an abstract idea . . . [and] include inventive components". As the Court has already noted, plaintiff cannot simply rely on such conclusory assertions. See IBM, 50 F.4th at 1379. As to the subject patents there is no inventive concept.

5. Claim 1 of U.S. Patent No. 6,757,662

The '662 Patent claims:

1. A method for providing an advertisement for display on a computer system, comprising the steps of:

[a] storing at least one of a plurality of part identifications, wherein each part identification is a character string identified with at least one particular product;

[b] storing contact information for at least one seller selling the at least one particular product;

[c] storing advertising information for the at least one seller wishing to advertise the at least one particular product; receiving the at least one of a plurality of part identifications from a user request;

[d] triggering at least one triggered advertisement related to the at least one particular product to be immediately displayed if:

[i] the user is associated with a pre-determined desired group corresponding to the triggered advertisement, and

[ii] the user is not associated with a pre-determined no-show group corresponding to the triggered advertisement;

[iii] wherein the at least one triggered advertisement is triggered by comparing the at least one of a plurality of part identifications with stored sellers wishing to advertise particular products identified by the at least one of a plurality of part identifications;

[e] triggering a communication relating information about the user to at least one seller, wherein the communication is triggered by comparing the least one of a plurality of part identifications with stored sellers wishing to sell particular products identified by the at least one of a plurality of part identifications.

At the first step of the Alice inquiry, the Court concludes that the '662 Patent is directed to the abstract idea of serving advertisements to customers based on their disclosed interests. In spite of Alto's protestations, the claims teach nothing more than the performance of basic advertising concepts (i.e., comparing a customer's request to a preset list of advertisements associated with the requested item) on a computer. See, e.g., Intellectual Ventures I LLC v. J. Crew Group, Inc., 2016 U.S. Dist. LEXIS 125587, at *13-15 (E.D. Tex. Aug. 24, 2016), aff'd, 703 Fed. Appx. 991 (Fed. Cir. Nov. 20, 2017) (holding that basic marketing concepts which could be performed by "the typical sales clerk" were patent-ineligible). Even presuming that the patent improves upon the prior art by restricting the communication of advertisements based upon

whether the customer is associated with certain pre-determined groups (e.g., an advertiser could place customers affiliated with particular companies on a “no show” list), that is simply another abstract idea which could also be performed by a salesperson or store clerk.

The conventional functions recited in the '662 Patent implement basic business concepts on a generic computer and therefore fail to transform the underlying idea into something patent-eligible at Alice step two. See id. at *16 (explaining that a patent which claims “nothing more than an abstract marketing idea implemented by general computer components” is patent-ineligible). Alto contends that the claim has more merit than that but, apart from stating that claim 1 contains “eight or more steps” which are “computer centric”, makes no effort to substantiate the existence of an inventive concept which is “significantly more” than the abstract idea itself. Alice, 573 U.S. at 217-18. The Court is underwhelmed by such an unsupported and conclusory argument.

6. Claim 1 of U.S. Patent No. 6,691,103

The '103 Patent claims:

1. A method for searching a database including a plurality of records, at least some of said records having a plurality of record fields and a plurality of record elements, said method comprising:

[a] receiving a search criteria including a plurality of search elements corresponding to at

least some of the record elements of said database, each of said search elements being capable of returning one or more corresponding search results from the records of said database;

[b] ordering the search elements of said search criteria based upon an expected size of the corresponding search results from said database; and

[c] searching said database with one of said search elements, which is expected to provide a first group of said search results, before searching said database with another one of said search elements, which is expected to provide a second group of said search results, said second group being larger in size than said first group.

The '103 Patent purports to claim a method for receiving search criteria which include multiple elements, ordering those search elements by the expected size of each of their search results and then successively searching the database beginning with the element expected to yield the smallest set of results. In spite of the patent's elaborate jargon, the Court finds that the claims are directed to the abstract idea of executing a search which contains multiple elements in a sequential manner by: 1) first searching for the element expected to yield the fewest number of results and 2) then searching for the element(s) expected to yield more results. See Ericsson Inc. v. TCL Commun. Tech. Holdings Ltd., 955 F.3d 1317, 1326 (Fed. Cir. 2020). All of the claimed steps could be performed by a human "mentally or with pen and paper." Intellectual Ventures I LLC v. Symantec Corp., 838 F.3d 1307, 1318 (Fed. Cir. 2016).

At the second step of the Alice framework, the Court searches for an inventive concept but finds none. The claims “merely describe the functions of the abstract idea itself, without particularity.” Capital One, 850 F.3d at 1341. Furthermore, the specification suggests that the “insight” of the '103 Patent is that it is quicker to carry out a search containing multiple elements by starting with the element expected to yield the fewest results. That abstract and well-known concept is performed by someone who searches her Boston address book for an address with the street name “Courthouse Way” before searching for those at the street number “1”.

7. Claim 1 of U.S. Patent No. 6,662,190

The '190 Patent claims:

1. A method for data extraction of a text file to a record file, said method comprising the steps of:

- (a) identifying an area of interest in a text file;
- (b) parsing said area of interest in order to identify a list of values of attributes in said area of interest;
- (c) recognizing a first set of values in said list that match values contained in an attribute value vocabulary;
- (d) forming a record using said first set of values;
- (e) gleaning a second set of values in said list that do not match values contained in said attribute value vocabulary; and

(g) adding said second set of values to said record.²

The Court finds that the '190 Patent is directed to the abstract idea of identifying new data and adding it to an existing record. The patent therefore claims an ordinary and unremarkable mental activity and suggests (by the invocation of a "text file" and "record file") that it be done on a computer. That is an abstract, patent-ineligible invention. See Weisner, 51 F.4th at 1082-83 ("[a]utomation or digitization of a conventional method of organizing human activity" is not a patentable improvement).

To the extent that Alto suggests there is an inventive concept because the claimed invention is (potentially) limited to the "computer context", it is incorrect. See Univ. of Fla. Rsch. Found., Inc. v. Gen. Elec. Co., 916 F.3d 1363, 1367 (Fed. Cir. 2019) (holding that "do it on a computer" claims are directed to abstract ideas). Alto proffers no other non-conclusory inventive concept and it is clear from the patent that there is none.

C. Summary

The Court concludes that the claims of the '100 Patent (asserted in Count I of the amended complaint) arguably contain an inventive concept and therefore may be patent-eligible. With

² The Court notes that the '190 Patent proceeds directly from claim [1][e] to claim [1][g] without reciting any step at claim [1][f].

respect to the remaining patents (asserted in Counts II-IX), however, the Court concludes that they are directed to abstract ideas and do not contain inventive concepts.

ORDER

In accordance with the foregoing, defendant's motion to dismiss (Docket No. 21) is, with respect to Count I, **DENIED**, but is otherwise, with respect to Counts II-IX, **ALLOWED**.

So ordered.

/s/ Nathaniel M. Gorton
Nathaniel M. Gorton
United States District Judge

Dated: August 16, 2023