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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte NEELAKANTAN SUNDARESAN

Appeal 2017-000401¹
Application 11/636,257²
Technology Center 3600

Before NINA L. MEDLOCK, BRADLEY B. BAYAT, and
AMEE A. SHAH, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner’s final rejection of claims 1–15 and 26–31. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Our decision references Appellant’s Appeal Brief (“App. Br.,” filed March 25, 2016) and Reply Brief (“Reply Br.,” filed September 28, 2016), and the Examiner’s Answer (“Ans.,” mailed July 28, 2016) and Final Office Action (“Final Act.,” mailed October 27, 2015).

² Appellant identifies PayPal, Inc. as the real party in interest. App. Br. 4.

CLAIMED INVENTION

Appellant's claimed invention "relates generally to the technical field of data-processing and, in one specific example, to a method and system for creating and maintaining electronic data pertaining to communities" (Spec. ¶ 2).

Claims 1, 7, 26, and 29 are the independent claims on appeal. Claims 1 and 7, reproduced below, are illustrative of the claimed subject matter:

1. A computer-implemented method comprising:
 - accessing community content of an online community in a networked system, the online community including a group of users of the networked system with a similar interest, the community content related to the similar interest and available according to the networked system;
 - generating a graphical user interface that displays the community content according to a first display order of a plurality of postings of the community content;
 - identifying one or more key terms that are representative of the group of users with the similar interest;
 - accessing the community content including the plurality of postings;
 - determining a recency of each posting in the plurality of postings;
 - accessing reputational information of a corresponding poster of each posting in the plurality of postings;
 - determining relevancy of each posting in the plurality of postings to the online community based on inclusion of the one or more key terms in each posting;
 - performing, using at least one processor, a weighted average calculation of each posting in the plurality of postings based on the recency, reputational information, and relevancy of each posting;
 - determining a second display order of the plurality of postings in the community content based on the weighted average calculation;

updating the community content in the networked system based on the second display order; and

changing, in response to and based on updating the community content, the graphical user interface to display the community content according to the second display order.

7. A computer-implemented method comprising:

identifying, using at least one processor, a community within a networked system, the community including a group of users of the networked system with a similar interest and each user of the group of users being a member of the community, the identifying of the community comprising performing, using a category hierarchy, a text/relationship analysis on transaction data to identify at least one of a key term and a phrase for the community that is representative of the group of users with the similar interest, the transaction data including a transaction history between users involving at least one product offered for sale;

assessing system activity of a potential candidate to the community, the potential candidate selected from among all users of the networked system;

determining that the potential candidate has met a purchasing threshold based on the user activity, the purchasing threshold being based on a number of purchases made by the potential candidate using the networked system; and

in response to determining the potential candidate has met the purchasing threshold, inviting the potential candidate to join the community as an initial member.

REJECTION

Claims 1–15 and 26–31 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

ANALYSIS

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.”

35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice Corp.*, 134 S. Ct. at 2355. The first step in that analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are not directed to a patent-ineligible concept, e.g., an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. at 79, 78).

The Court acknowledged in *Mayo*, that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo*, 566 U.S. at 71. Therefore, the Federal Circuit has instructed that claims are to be considered in their entirety to determine “whether their character as a whole is directed to excluded subject matter.” *McRO, Inc. v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)).

In rejecting claims 1–6 and 26–28 under 35 U.S.C. § 101, the Examiner determined that the claims are directed to “calculating a weighted average of postings based on recency, reputational information and relevancy of each posting; and using [the] weighted average calculation to adjust an order of the postings” (Final Act. 2). The Examiner reasoned that this is an abstract idea, similar to other concepts that the courts have been identified as abstract, e.g., comparing new and stored information and using rules to identify options in *SmartGene*,³ and that the claims, viewed as whole, do not recite additional elements or a combination of elements that amounts to significantly more than the judicial exception itself (*id.* at 2–3).

The Examiner determined that this same rationale applies to claims 7–15 and 29–31 (*id.* at 3). More particularly, the Examiner determined that claims 7–15 and 29–31 are directed to “to inviting a potential candidate to join a community as an initial member based on the potential candidate meeting a purchasing threshold using a networked system”; that this concept is “similar to the concepts involving human activity relating to commercial practices (i.e. hedging in [*Bilski v. Kappos*, 561 U.S. 593 (2010)]) which have been found by the courts to be abstract ideas”; and that “the claim limitations in addition to the abstract idea include [a] networked system and [a] processor,” which do not amount significantly more than the abstract idea itself (*id.* at 4).

Independent Claims 1 and 26 and Dependent Claims 2–6, 27, and 28

Appellant ostensibly does not challenge the Examiner’s determination that claims 1–6 and 26–28 are directed to an abstract idea. Instead,

³ *SmartGene, Inc. v. Advanced Biological Labs, S.A.*, 555 F. App’x 950 (Fed. Cir. 2014).

Appellant maintains that independent claims 1 and 26 recite “‘something more’ than the mere calculation of a weighted average” (App. Br. 10–12).

In this regard, Appellant argues that claims 1 and 26 recite “a specific application of a determined weighted average calculation that includes changing a graphical user interface based on community content that has been updated based on the weighted average calculation” (*id.* at 12).

Appellant maintains that claims 1 and 26, as such, impose “meaningful limits to the weighted average calculation that improves an existing technological area in a manner analogous to the claims in [*Diamond v. Diehr*, 450 US 175 (1981)] imposing meaningful limits to the Arrhenius equation to improve a technological process” (*id.*; *see also* Reply Br. 2–3).

Appellant’s reliance on *Diehr* is misplaced. The claims in *Diehr* were directed to a process for curing synthetic rubber, and recited a series of steps (e.g., installing rubber in a press, closing the mold, constantly determining the temperature of the mold, constantly recalculating the appropriate cure time through the use of the Arrhenius equation and a digital computer, and automatically opening the press at the proper time) that together provided a significant and novel practical application of the well-known Arrhenius equation and transformed uncured synthetic rubber into a new state or thing. *See Diehr*, 450 U.S. at 184–87. The Court determined that although the invention employed a well-known equation, it used that equation in a process designed to solve a technological problem in conventional industry practice. *Alice Corp.*, 134 S. Ct. 2348 (citing *Diehr*, 450 U.S. at 177). The claims in *Diehr* were, thus, patent-eligible because they improved an existing technological process. *Id.*

Appellant argues here that claims 1 and 26 “improve the technological field of displaying, organizing, and managing online content just as the elements of the claims in *Diehr* imposed meaningful limits to the Arrhenius equation to improve a technological process” (App. Br. 12). But, we are not persuaded that displaying, organizing, and managing online content is a technical problem, as opposed to a business problem. Nor are we persuaded that selecting particular content for display and displaying that content in a particular order based on a weighted average calculation is a technical solution, rather than a commercial solution.

The method of claims 1 and 26 does not improve an existing technological process; nor does it solve a technical problem. Instead, claims 1 and 26, in our view, are substantially similar to the claims at issue in *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016). There, the Federal Circuit held that the claims were not patent-eligible because “[t]he advance they purport to make is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions.” *Id.* at 1354.

Similarly here, we find no indication in the Specification that an inventive or specialized graphical user interface (“GUI”) is required. Nor is there any indication of record that the particular operations recited in claims 1 and 26 require any specialized computer hardware or other inventive computer components, invoke any assertedly inventive programming, or that the claimed invention is implemented using something other than generic computer components to perform the claimed method steps. To the contrary, the Specification is clear that the claimed invention

may be implemented using generic computer components (*See Spec.* ¶¶ 182–186), which is not enough for patent-eligibility. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (“After *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.”).

For much the same reasons, we also are not persuaded by Appellant’s argument that claims 1 and 26 are analogous to those at issue in *DDR Holdings* (App. Br. 12; *see also* Reply Br. 5–6). Appellant asserts that claims 1 and 26 are necessarily rooted in computer technology to solve a problem (i.e., the “technological” problem that online communities face in determining how to manage, organize, and display community content) specifically arising in computer networks (App. Br. 12–13) and, like the claims in *DDR Holdings*, address a business challenge particular to the Internet (*id.* at 13). Yet, we find no parallel between claims 1 and 26 and those in *DDR Holdings*.

The claims at issue in *DDR Holdings* were directed to retaining website visitors, and in particular to a system that modified the conventional web browsing experience by directing a user of a host website, who clicks an advertisement, to a “store within a store” on the host website, rather directing the user to the advertiser’s third-party website. *DDR Holdings*, 773 F.3d at 1257–1258. The court determined that “the claims address a business challenge (retaining website visitors) [that] is a challenge particular to the Internet.” *Id.* at 1257. The court also determined that the invention was “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks,” and that the claimed invention did not simply use computers to serve a conventional

business purpose. *Id.* Rather, there was a change to the routine, conventional functioning of Internet hyperlink protocol. *Id.*

Appellant asserts that the claimed updating of community content based on a weighted average calculation and changing a corresponding graphical user interface addresses the Internet-based problem of how to manage, organize, and display community content of an online community, similar to the claims in *DDR Holdings* addressing a business challenge that is particular to the Internet (App. Br. 13). Yet, as the court cautioned in *DDR Holdings*, “not all claims purporting to address Internet-centric challenges are eligible for patent.” *DDR Holdings*, 773 F.3d at 1258. Thus, in *Ultrameercial, Inc. v. Hulu, LLC*, 772 F.3d 709 (Fed. Cir. 2014), although the patentee argued that its claims were “directed to a specific method of advertising and content distribution that was previously unknown and never employed on the Internet before,” *id.* at 714, the court determined that this alone could not render the claims patent-eligible where the claims merely recited the abstract idea of “offering media content in exchange for viewing an advertisement,” along with “routine additional steps such as updating an activity log, requiring a request from the consumer to view the ad, restrictions on public access, and use of the Internet.” *Id.* at 715–716.

Much like the situation in *Ultrameercial*, there is no indication here that a computer network, or the Internet, in particular, is used other than in its normal, expected, and routine manner for receiving and processing data.

We also are not persuaded of Examiner error to the extent that Appellant argues that claims 1 and 26 are patent-eligible because the claimed method requires the use of a computer (App. Br. 13–14 (noting that the amount of community content of online communities is so vast that a

computer is required to perform the recited operations)). Again, there is no indication in the Specification, nor does Appellant point to any indication, that specialized hardware or any other inventive computer components are required, or that the claimed method is implemented using anything other than a generic computer. And, as the Supreme Court made clear in *Alice*, the recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible. *See Alice Corp.*, 134 S. Ct. at 2358 (holding that if a patent’s recitation of a computer amounts to a mere instruction to implement an abstract idea on a computer, that addition cannot impart patent eligibility).

Independent Claims 7 and 29 and Dependent Claims 8–15, 30, and 31

Turning to claims 7–15 and 29–31, we are not persuaded, as an initial matter, that the Examiner has oversimplified independent claims 7 and 29 as directed to “inviting a potential candidate to join a community as an initial member based on the potential candidate meeting a purchasing threshold using a networked system,” or that the Examiner has otherwise failed to consider the claims as a whole (App. Br. 17; *see also* Reply Br. 7–8).

Appellant asserts that independent claims 7 and 29 “do not merely recite inviting a potential candidate to join a community but also recite identifying that community in the networked system” (*id.* (quoting the “identifying” step, as recited in claim 7, and similarly recited in claim 29)). Appellant, thus, ostensibly maintains that the concept to which claims 7 and 29 are directed should properly include additional details regarding the nature of the claimed community, e.g., that the community is within a networked system and includes a group of users of the networked system with a similar interest.

Appellant’s argument is not persuasive of Examiner error at least because an abstract idea can be expressed at various levels of abstraction. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016) (“An abstract idea can generally be described at different levels of abstraction. As the Board has done, the claimed abstract idea could be described as generating menus on a computer, or generating a second menu from a first menu and sending the second menu to another location. It could be described in other ways, including, as indicated in the specification, taking orders from restaurant customers on a computer.”). That the Examiner articulates the abstract idea at a higher level of abstraction than does Appellant is an insufficient basis for concluding that the claims are not directed to an abstract idea.

We also are not persuaded of Examiner error to the extent that Appellant argues that claims 7 and 29 are not directed to an abstract idea because the claims are not analogous to any of claimed concepts identified as “being human activity based abstract ideas” in the Office’s “July 2015 Update: Subject Matter Eligibility”⁴ to the 2014 Interim Guidance on Subject Matter Eligibility, 79 Fed. Reg. 74618 (Dec. 16, 2014) (the “Update”) (App. Br. 16–17; *see also* Reply Br. 6–7). The Update is intended to provide guidance to the Examining Corps in addressing subject matter eligibility. But there is no indication that the included examples are intended to be exhaustive, as opposed to providing a broad framework within which an analysis of patent-eligibility should be conducted.

⁴ Available at <https://www.uspto.gov/sites/default/files/documents/ieg-july-2015-update.pdf>.

Turning to the second step of the *Mayo/Alice* framework, Appellant argues that claims 7 and 29 amount to significantly more than an abstract idea, and are analogous to the claims in *DDR Holdings*, because “identifying, within a networked system, a community that includes a group of users of the networked system is non-trivial” and “requires technical elements and solutions (*e.g.*, performing, using a category hierarchy and a text/relationship analysis on transaction data) in order to be done” (App. Br. 18). Yet, as with claims 1 and 26, we find no indication in the record, nor does Appellant point us to any indication, that the particular operations recited in claims 7 and 29 require any specialized computer hardware or other inventive computer components, invoke any assertedly inventive programming, or that the claimed invention is implemented using something other than generic computer components to perform the claimed method.

Finally, we are not persuaded that claims 7 and 29 are patent-eligible because “identifying the community within the networked system in the manner claimed requires a computer because of the vastness of the information analyzed” (*id.*). Indeed, to the extent that Appellant maintains that a claim that requires a computer is necessarily “rooted in computer technology,” we note that a similar argument was expressly rejected by the Court in *Alice*. See *Alice Corp.*, 134 S. Ct. at 2358 (“the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention”). Also, as described above, there is no indication that the recited “processor” in claim 7 or the “machine” recited in claim 29 is something other than a generic computer component, which is not enough for patent-eligibility. *Id.*

Additional Arguments

Appellant asserts in the Reply Brief that the Federal Circuit’s decisions in *Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016); and *McRO* “support that the claims of the application at issue are directed toward patentable subject matter under § 101” (Reply Br. 8). We cannot agree.

Focusing first on *Bascom*, Appellant asserts that, similar to *Bascom*, claims 1 and 26 “describe a technology-based solution to enhance an online community in a networked system by updating content for display via a graphical user interface” and “do not attempt to preempt all content displayed via a graphical user interface; rather they ‘recite a specific, discrete implementation’” (*id.* at 9). Yet the claims in *Bascom* were not held patent-eligible merely because there was no preemption. Instead, the Federal Circuit held that the second step of the *Mayo/Alice* framework was satisfied because the claimed invention “represents a ‘software-based invention[] that improve[s] the performance of the computer system itself.’” *Bascom*, 827 F.3d at 1351 (stating that like *DDR Holdings*, where the patent “claimed a technical solution to a problem unique to the Internet,” the patent in *Bascom* claimed a “technology-based solution . . . to filter content on the Internet that overcomes existing problems with other Internet filtering systems . . . making it more dynamic and efficient”).

We find no comparable situation here. And to the extent Appellant maintains that the claims are patent-eligible because there is no preemption, we note that preemption is not the sole test for patent-eligibility.

“[P]reemption may signal patent ineligible subject matter, [but] the absence

of complete preemption does not demonstrate patent eligibility.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015).

We also cannot agree with Appellant that there is any parallel between the present claims and those at issue in *Enfish*, which the Federal Circuit held were directed to “a specific improvement to the way computers operate.” *Enfish*, 822 F.3d at 1336.

Appellant asserts that “claims 1 and 26 are directed to a technology-based solution to improve an online community in a networked system by updating content for display via a graphical user interface” and that “claims 7 and 29 recite inviting a potential candidate to join a community in a networked system, both of which provide specific improvements to a computer in the technological field of data management for an online community in a networked system” (Reply Br. 10). Yet, we find nothing in the Specification, nor does Appellant point us to anything in the Specification, that ascribes any improvement in computer functionality to the claimed invention.

For much the same reasons, we also cannot agree with Appellant that the present claims are analogous to the claims at issue in *McRO*. Appellant asserts that, similar to the patent-eligible claims in *McRO*, claim 1 recites “a specific computer-implemented method for displaying and changing community content in a graphical user interface using particular information and techniques and does not preempt approaches that use rules of different structure or different techniques” and that “[c]laims 7, 26 and 29 likewise recite specific systems and/or methods using particular information and techniques that do not preempt approaches that use rules of different structure or different techniques” (Reply Br. 10–11). But, the Federal

Circuit premised its determination that the claims in *McRO* were patent-eligible on the fact that the claims, when considered as a whole, were directed to a technological improvement over the existing, manual 3–D animation techniques and used limited rules in a process specifically designed to achieve an improved technological result in conventional industry practice, and not merely on the specificity of the claimed animation scheme. Also, as described above, the absence of preemption does not demonstrate patent eligibility. *Ariosa*, 788 F.3d at 1379.

We are not persuaded for the foregoing reasons that the Examiner erred in rejecting claims 1–15 and 26–31 under 35 U.S.C. § 101. Therefore, we affirm the Examiner’s rejection.

DECISION

The Examiner’s rejection of claims 1–15 and 26–31 under 35 U.S.C. § 101 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED