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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MAURICE DAVID LISCIA

Appeal 2017-005773
Application 13/568,366
Technology Center 3600

Before CARLA M. KRIVAK, HUNG H. BUI, and
JON M. JURGOVAN, *Administrative Patent Judges*.

KRIVAK, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from a final rejection of claims 1, 3–9, 11–17, and 19–24, which are all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ The Appeal Brief identifies Mastercard International, Inc. as the real party in interest (App. Br. 2).

STATEMENT OF THE CASE

Appellant's invention is directed to a method, system, and computer-readable storage medium for "providing enhanced merchant information to the user of a cashless payment device," the enhanced merchant information including "additional merchant information or information about a program the merchant participates in" (Abstract). The enhanced merchant information may be provided "on the cardholders' periodic statements" (Spec. ¶ 17).

Claims 1, 9, and 17 are independent. Independent claim 1, reproduced below, is exemplary of the subject matter on appeal.

1. A method for providing enhanced merchant information to the user of a cashless payment device, the method comprising using a network-enabled computing device to:

receive, via a communication network, a transaction request from an acquirer on behalf of a merchant in a cashless transaction clearing record, the transaction request including data identifying the merchant and the payment device;

compare the data identifying the merchant to a database including a list of participating merchants to determine if a match exists in the database;

in response to determining a match exists in the database between the data identifying the merchant in the transaction request and the list of participating merchants, determine whether the data identifying the merchant in the transaction request should be enhanced with additional merchant information or information about a program the merchant participates in;

in response to determining that the data identifying the merchant should be enhanced with the additional merchant or program information, extracting enhanced merchant or program information from a database beyond the data identifying the merchant;

append the extracted information to the transaction request; and
forward the transaction request having the appended information to an issuer of the payment device via the communication network;
wherein the database is assembled and maintained by a network operator as an intermediary between the acquirer and the issuer; and
wherein the extracting enhanced information is performed by the network operator after receiving the transaction request from the acquirer.

REJECTION

The Examiner rejected claims 1, 3–9, 11–17, and 19–24 under 35 U.S.C. § 101 as directed to non-statutory subject matter.

ANALYSIS

Under 35 U.S.C. § 101, a patent may be obtained for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” The Supreme Court has “long held that this provision contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable” (*Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013))). 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, 82–84 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of these concepts” (*Alice*, 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,” such as an abstract idea (*id.*). 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). We, therefore, look to whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that is the abstract idea and merely invoke generic processes and machinery (*see Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016)). If the claims are not directed to 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 the additional elements ‘transform the nature of the claim’ into a patent-eligible application” (*Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 79, 78)).

Alice/Mayo—Step 1 (Abstract Idea)

Turning to the first part of the *Alice/Mayo* analysis, the Examiner determines claims 1, 9, and 17 are directed to “the abstract idea of using an intermediary to enhance [merchant] data”—particularly, using “a network operator as an intermediary between an acquirer and an issuer”—which is similar to methods of organizing human activities using a commercial intermediary as identified in *Alice* and *Bilski* (Final Act. 2–3) (*see Alice*, 134 S. Ct. at 2356–57 (intermediated settlement of traded or exchanged financial obligations to mitigate the risk that one party will not perform); and *Bilski v. Kappos*, 561 U.S. 593, 599, 611 (2010) (risk hedging during consumer transactions)). The Examiner also finds claims 1, 9, and 17 are directed to

an abstract idea of “comparing received data (merchant data) and stored data (list of participating merchants) to determine what to do with the data (i.e., whether or not to enhance the data),” which is similar to the abstract ideas of organizing and comparing information discussed in *Cyberfone* and *SmartGene* (Final Act. 2–3; Ans. 4) (see *Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App’x 988, 992 (Fed. Cir. 2014); and *SmartGene, Inc. v. Advanced Biological Labs., SA*, 852 F. Supp. 2d 42 (D.D.C. 2012), *aff’d* 555 F. App’x 950 (Fed. Cir. 2014)).

Appellant argues independent claims 1, 9, and 17 together (Appeal Br. 8–9). We select claim 1 as representative. Claims 9 and 17 stand or fall with claim 1 (see 37 C.F.R. § 41.37(c)(1)(iv)).

Appellant contends the Examiner erred in rejecting the claims, as the claims are patent eligible based on “a teaching in the specification about how the claimed invention improves a computer or other technology,” particularly by improving “the field of financial transaction processing” (App. Br. 6, 10 (citing Spec. ¶¶ 17, 46; USPTO Memorandum, “Recent Subject Matter Eligibility Decisions,” published on November 2, 2016 (“Memorandum”))).² Appellant also argues the claims recite unconventional “tangible steps/tangible components configured to conduct electronic payment transactions with resulting enhancements” in the level of detail in transaction requests, which “is more than merely claiming an idea” (App. Br. 10–11).

² Robert W. Bahr, *Memorandum—Recent Subject Matter Eligibility Decisions (McRO, Inc. dba Planet Blue v. Bandai Namco Games America Inc., BASCOM Global Internet Services v. AT&T Mobility LLC, and Amdocs (Israel) Ltd. v. Openet Telecom, Inc.)*, United States Patent and Trademark Office (November 2, 2016).

We are not persuaded by Appellant’s arguments. As the Examiner correctly finds, the claims are abstract because they are directed to “comparing and formatting [commercial] information for transmission”—an abstract idea similar to data gathering and manipulation techniques identified in *Cyberfone*, *CyberSource*, *Intellectual Ventures*, *Digitech*, and *Content Extraction* (Final Act. 2; Ans. 4) (*see Cyberfone*, 558 F. App’x at 988; *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011) (verifying the validity of a credit card transaction over the Internet, based on information about other transactions and credit card numbers using the same Internet address); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367, 1370 (Fed. Cir. 2015) (“tracking financial transactions to determine whether they exceed a pre-set spending limit” and notifying user when spending limit is reached, is an abstract idea); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014) (employing mathematical algorithms to manipulate existing information); and *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014) (finding “[t]he concept of data collection, recognition, and storage is undisputedly well-known,” and “humans have always performed these functions”)).

We further agree with the Examiner claim 1 does not recite “an improvement in computer-related technology,” as Appellant argues (*see* App. Br. 10; Ans. 4). Appellant’s Specification also does not describe “how the claimed invention improves a computer or other technology” (*see* App. Br. 10). Rather, claim 1’s steps are directed to “[p]roviding enhanced merchant information by extracting data from a database and appending such extracted data to a transaction request[, which] is simply data

processing which is considered a routine computer function” (Final Act. 4–5). Appellant’s Specification similarly describes a network operator—such as MasterCard International—determines whether a merchant “had affirmatively enrolled in an enhanced merchant data program with the network operator” and (if the merchant is enrolled) supplements the merchant’s transaction data with pre-specified merchant information (*see* Spec. ¶¶ 12–13, 32, 38, 43–44, 46).

In contrast, *McRO*’s claims and Specification (as discussed in the Memorandum) employ “rules that define output morph weight set stream as a function of phoneme sequence and time of said phoneme sequence” to “achieve an improved technological result” (*see McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299, 1310, 1316 (Fed. Cir. 2016); Memorandum 2–3). The improved technological result allows “computers to produce ‘accurate and realistic lip synchronization and facial expressions in animated characters’ that previously could only be produced by human animators” (*see McRO*, 837 F.3d at 1313).

We are also unpersuaded by Appellant’s argument that claim 1 is not abstract because it includes “tangible steps/components [that] provide a discernible result” as a solution to a problem (App. Br. 10–11). As the Supreme Court emphasized in *Bilski*, “although the machine-or-transformation test is not the only test for patentability, this by no means indicates that anything which produces a ‘useful, concrete, and tangible result,’ *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1373 (CA Fed. 1998), is patentable” (*Bilski*, 561 U.S. at 658–660 (Breyer, J., concurring)). Thus, “not every claim that recites concrete, tangible components escapes the reach of the abstract-idea

inquiry” (*In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016)). The inability of a human to accomplish each step “does not alone confer patentability” (*see FairWarning, IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1098 (Fed. Cir. 2016)). Additionally, Appellant’s claim 1 focuses on a business *problem* of supplying credit card holders with detailed merchant information to promote the merchant’s business and loyalty programs to cardholders—a problem that is *not* a technical problem or one rooted in computer technology or particular only to the Internet (*see Spec.* ¶¶ 9, 13, 17, 45–46, 52; Ans. 4) (*see DDR Holdings, LLC, v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014) (the patent eligible “claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks”)). As Appellant’s Specification explains, solving this problem provides cardholders with enhanced merchant information “benefit[ing] both the merchants . . . and the network operators . . . through repeat business and increased sales” (*see Spec.* ¶¶ 17, 47).

Accordingly, we agree with the Examiner claims 1, 9, and 17 are directed to an abstract idea.

Alice/Mayo—Step 2 (Inventive Concept)

Appellant also alleges the claims provide an “inventive concept” via computer “hardware arranged in an unconventional manner with resulting unconventional processing” (Reply Br. 3–4).

Appellant’s arguments are not persuasive. As the Examiner shows, the claims use “conventional technological means” to “extract[] data from a database and append[] such extracted data to a transaction request,” which are routine computer functions for manipulating data (Ans. 4; Final Act. 4–

5). However, Appellant has not demonstrated the claims provide (i) “a specific improvement to the way computers operate” as explained in *Enfish*, (ii) a “solution . . . necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks” as in *DDR*, or (iii) or “a technology-based solution . . . to filter content on the Internet that overcomes existing problems with other Internet filtering systems” and “improve[s] an existing technological process” as in *Bascom* (see *Enfish*, 822 F.3d at 1336; *DDR Holdings*, 773 F.3d at 1257; *Bascom Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1351 (Fed. Cir. 2016); see also Final Act. 5). Appellant’s claims do not cover a technology-based solution that improves an existing technological process (Ans. 4; Final Act. 5).

Appellant also contends “[w]ith the subject invention, financial transaction requests are ‘enhanced’ based on a computer hardware arrangement with unconventional processing,” and therefore the “claims-on-appeal are analogous to those found to be patent eligible in *Amdocs*” (App. Br. 9–10 (citing *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288 (Fed. Cir. 2016))). Appellant argues the claims on appeal “[e]nhance” data in analogous manner to *Amdocs*’ “enhancing” through a “distributed architecture” (App. Br. 8; Reply Br. 2, 4). We disagree that the claims here resemble the claims in *Amdocs*. There, the patents concerned network components “arrayed in a distributed architecture” that “collect[ed] and process[ed] data close to its source,” and thereby “enable[d] load distribution” and reduced network congestion (see *Amdocs*, 841 F.3d at 1291–92, 1300, 1303, 1306). In *Amdocs*, the term “enhance” refers “to apply a number of field enhancements in a distributed fashion” (*Amdocs*,

761 F.3d at 1338–40) and “this distributed enhancement [is] a critical advancement over the prior art” (*Amdocs*, 841 F.3d at 1300) and, as such, *Amdocs*’ claims “entail[] an unconventional solution (enhancing data in a distributed fashion) to a technological problem (massive record flows which previously required massive databases)” and “improve the performance of the system itself.” *Id.* at 1302.

Accordingly, the Federal Circuit decided *Amdocs*’ claims satisfied *Mayo/Alice* step two because they: (1) “entail[ed] an unconventional technological solution . . . to a technological problem” that required generic computer components to “operate in an unconventional manner to achieve an improvement in computer functionality”; or (2) “recite[d] a technological solution to a technological problem specific to computer networks—an unconventional solution that was an improvement over the prior art” (*id.* at 1299–1306).

In contrast to *Amdocs*, the claims here do not achieve an improvement in computer functionality (*see* Ans. 3–4). Appellant does not describe an advance in hardware or software that, for example, causes a computer itself or a database itself to operate faster or more efficiently. Appellant does not address the operation of a computer itself or a database itself. Instead, Appellant discusses “appending information [merchant- or program-specific data extracted from a database] to a financial transaction request” that allegedly provides “enhanced information on [customers’] statements with contemplated increased business and sales from those customers for merchants and network operators” (App. Br. 9–10 (citing Spec. ¶¶ 17, 33, 46, Fig. 2)). Further, the claims here do not recite a technological solution to a technological problem specific to computer networks, e.g., because

Appellant’s claims do not require unconventional network configurations (*see* App. Br. 12–18 (Claims App.)). Rather, Appellant’s claims require generic computing components (a network operator’s processor, databases, and storage medium) connected to one another.

Accordingly, claims 1, 9, and 17, when considered “both individually and ‘as an ordered combination,’” amount to nothing more than an attempt to patent the abstract idea embodied in the steps of the claims (*see Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 78)).

Additional Argument

Appellants argue that the claims do “not preempt all methods of payment processing.” App. Br. 11. However, this argument is not persuasive because, although “preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). “Where a patent’s claims are deemed only to disclose patent ineligible subject matter” under the *Alice/Mayo* framework, “preemption concerns are fully addressed and made moot.” *Id.*

Because we agree with the Examiner’s analysis and find Appellant’s arguments insufficient to show error, we sustain the Examiner’s § 101 rejection of independent claims 1, 9, and 17, and dependent claims 3–8, 11–16, and 19–24, for which no separate arguments are provided.

DECISION

The Examiner’s decision rejecting claims 1, 3–9, 11–17, and 19–24 is affirmed.

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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