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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MICHAEL SCOTT LEY, CHRISTINE JOHNS,
CHRISTOPHER MICHAEL BAJGIER, DAVID WISELY VONDLE,
DARIO FRANCESCO BUZZINI, MICHAEL AARON CHAPMAN,
MARK ALEXANDER JONES, and RODNEY HAL MONSON

Appeal 2016-007862¹
Application 12/366,711²
Technology Center 3600

Before HUBERT C. LORIN, BIBHUR. MOHANTY, and
NINA L. MEDLOCK, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ Our decision references Appellants' Appeal Brief ("App. Br.," filed January 25, 2016) and Reply Brief ("Reply Br.," filed August 16, 2016), and the Examiner's Answer ("Ans.," mailed June 17, 2016) and Final Office Action ("Final Act.," mailed May 26, 2015). The record includes a transcript of the March 29, 2018 oral hearing.

² Appellants identify The PNC Financial Services Group, Inc. as the real party in interest. App. Br. 1.

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–14. We have jurisdiction under 35 U.S.C. § 6(b). An oral hearing in the appeal was held on March 29, 2018.

We AFFIRM.

CLAIMED INVENTION

Appellants' claimed invention "is directed generally . . . to user interfaces and systems for providing Internet banking products and services" (Spec. ¶ 1).

Claims 1 and 8 are the independent claims on appeal. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A computer system comprising:
 - a processor programmed to execute instructions for displaying a graphical user interface comprising:
 - a controller operatively associated with the processor of the computer system, the controller programmed for redistributing funds between a first account and a second account, wherein the controller comprises a slidable element positionable over a fixed background element to define a first segment and a second segment of the background element, wherein a length of the first segment is representative of a balance of the first account, and wherein a length of the second segment is representative of a balance of the second account; and,
 - wherein the controller is further configured:
 - to graphically integrate and display information pertaining to at least the first account and the second account,

to enable selective redistribution of account balances between at least the first account and the second account, wherein the selective redistribution of balances effectuates shifting of funds between the first and second accounts via the computer system, and

to provide an indication of which portion of at least one of the first account and the second account will be consumed by future bill payments.

REJECTION

Claims 1–14 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 78, 79).

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)).

Here, in rejecting the pending claims under 35 U.S.C. § 101, the Examiner determines that the claims are directed to “redistributing funds between two accounts,” which the Examiner concludes is a fundamental economic practice and, therefore an abstract idea; the Examiner also determines that the additional claim elements, other than the abstract idea, do not provide meaningful limitations to transform the abstract idea into a patent-eligible application of the abstract idea such that the claims amount to significantly more than the abstract idea itself (Final Act. 2–8).

Independent Claims 1 and 8

Addressing the first step of the *Mayo/Alice* framework, Appellants argue that independent claims 1 and 8 are not directed to an abstract idea (App. Br. 10–11; *see also* Reply Br. 1–2). Instead, according to Appellants, the claims are directed to “an interactive system for redistributing account balances between two accounts that generates a dynamic operation between

the system and at least one user, as opposed to merely redistributing account balances between two accounts” (App. Br. 10).

The “directed to” inquiry applies a stage-one filter to the claims which, when considered in light of the Specification, is based on whether “their character as a whole is directed to excluded subject matter.” *Internet Patents Corp.*, 790 F.3d at 1346; *see also Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1376 (Fed. Cir. 2016). The relevant inquiry is, thus, whether the claims as a whole “focus on a specific means or method that improves the relevant technology,” or instead are “directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *McRO*, 837 F.3d at 1314 (citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016)).

Here, the Specification discloses that banking institutions frequently offer Internet banking products and services to their customers, and that these services typically are provided via a user interface (Spec. ¶ 2). The Specification notes that customer visualization and interaction with information presented via the user interface play a large role in determining customer satisfaction and, therefore, customer retention (*id.* ¶ 3). And the Specification explains that for many customers, the ability to quickly assess and understand their financial condition based on, e.g., the amount of money currently available to spend and current and upcoming financial obligations, is essential (*id.*). “Similarly, the ability to distribute funds between accounts in a manner that enhances the customer’s understanding of his finances is desirable” (*id.*).

Against this background, the Specification discloses that “the present application is directed to a graphical user interface including a controller for

redistributing funds between a first account and a second account” (*id.* ¶ 5), and describes that “[v]arious embodiments of the present invention are directed to a graphical user interface that may be provided by a banking institution as part of its internet banking system” (*id.* ¶ 12). The Specification discloses that the user interface includes a slide controller for shifting or redistributing funds between accounts, e.g., a demand account and a savings account, and describes that the graphical design of the controller is such that the financial conditions represented by the controller, i.e., the relative balances of the demand and savings accounts and what portion of the demand account will be consumed by approaching bill payments, are quickly and efficiently conveyed to the customer (*id.*).

Claim 1, for example, is directed to a computer system comprising a processor, and recites that the processor is programmed to display a graphical user interface, including a controller for redistributing funds between a first and second account. Claim 1 further recites that the controller is configured to graphically integrate and display information pertaining to the first and second accounts, enable selective redistribution of accounts balances between the two accounts, and provide an indication of which portion of at least one of the accounts will be consumed by future bill payments.

Considered in light of the Specification, the focus of the claimed invention is on organizing and displaying account information (e.g., account balances and the impact of approaching bill payments) and selectively redistributing funds between accounts, via a graphical user interface, to allow a customer to quickly assess and understand his or her financial condition, and not on any specific means for accomplishing this goal that

improves technology. Like the claims that the court in *Trading Technologies* distinguished as patent-ineligible, the present claims simply call for displaying and manipulating certain information (i.e., organizing and displaying account information and redistributing account balances) on a user interface—an abstract idea. *See Trading Techs. Int’l, Inc. v. CQG, Inc.*, No. 05-cv-4811, 2015 WL 774655, at *4 (N.D. Ill. Feb. 24, 2015). (“If the claims simply provided for ‘setting, displaying, and selecting’ data or information [on a graphical user interface], CQG would be correct in its assessment that the claims are directed to an abstract idea”), *aff’d*, 675 F. App’x 1001 (Fed. Cir. 2017); *see also Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1339 (Fed. Cir. 2013) (claim to maintaining an “insurance transaction database containing information related to an insurance transaction decomposed into a plurality of levels” and “allowing an authorized user to edit . . . and to update the information related to the insurance transaction” held to be an abstract idea).

Turning to the second step of the *Mayo/Alice* analysis, Appellants argue that even if the claims are directed to an abstract idea, the claims are nonetheless patent-eligible because “the limitations of independent claims 1 and 8 are meaningful so as to ensure against preemption” (App. Br. 11). That argument is not persuasive at least because preemption is not the sole test for patent-eligibility.

Although the Supreme Court has described “the concern that drives [the exclusion of abstract ideas from patent eligible subject matter] as one of pre-emption.,” *Alice Corp.*, 134 S. Ct. at 2354, characterizing preemption as a driving concern for patent eligibility is not the same as characterizing preemption as the sole test for patent-eligibility. “The Supreme Court has

made clear that the principle of preemption is the basis for the judicial exceptions to patentability” and “[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice Corp.*, 134 S. Ct. at 2354). “[P]reemption may signal patent ineligible subject matter, [but] the absence of complete preemption does not demonstrate patent eligibility.” *Id.*

Appellants further argue that “the functionalities and programming of the controller and the [graphical user interface] or user interface, along with the association with at least two financial accounts,” constitute significant meaningful limitations that “enable improvements through a cost effective, computationally minimal system having more efficient communications, less data storage, and less infrastructure than comparable prior art systems” (App. Br. 14). Yet, Appellants do not identify any evidence of record, short of attorney argument, to support that position. For example, Appellants do not identify or otherwise highlight any portions of the Specification. And we found nothing from our review of the Specification that ascribes any particular technological improvement to the claimed invention.

Appellants point to the “U.S. Patent Office Examples of Abstract Ideas,”³ and, more particularly to Example 2, and argue that the pending claims are similar to the claim in Example 2, which is described as patent-eligible (App. Br. 15; *see also* Reply Br. 3–4). Yet, we find no parallel between the present claims and the claim in Example 2 nor any parallel between the pending claims and those in *DDR Holdings, LLC v. Hotels.com*,

³ Available at https://www.uspto.gov/sites/default/files/documents/abstract_idea_examples.pdf

L.P., 773 F.3d 1245 (Fed. Cir. 2014) from which the claim in Example 2 was taken.

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 than 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.*

Appellants maintain here that the pending claims, like Example 2, i.e., the claim in *DDR Holdings*, are directed to “providing a technological solution **inseparable** from a computer,” i.e., that the claims are directed to “providing, in a very specific way, an efficient **technology-based solution** for quickly assessing relative balances of accounts, transferring of funds between accounts, and presenting which portion of an account that will be consumed by future bill payments” (App. Br. 15). Yet, unlike the situation in *DDR Holdings*, we fail to see how, and Appellants do not adequately explain how, using a user interface to quickly assess relative account balances, transfer funds between accounts, and display information regarding what portion of an account will be consumed by future bill

payments is “a challenge particular to the Internet.” Also, unlike the situation in *DDR Holdings*, 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, e.g., for receiving and transmitting information, to serve a conventional business purpose.

It also is telling here that although Appellants assert that this “technology-based solution” is provided by “describing particular system components, which are **inextricably tied** to a computer-implemented environment (e.g., with specific tangible parts programmed in specific ways to communicate very specific data),” we find no indication in the Specification, nor do Appellants point us to anything to indicate, that the claims require any specialized computer hardware or other inventive computer components, invoke any assertedly inventive programming, or that the claimed invention is implemented using other than generic computer components to perform generic computer functions, e.g., receiving, processing, and displaying information. Indeed, the Specification suggests just the opposite, i.e., that no inventive computer components or inventive programming is required:

[T]he embodiments described hereinabove may be implemented in computer software using any suitable computer software language. Such software may be stored on any type of suitable computer-readable medium or media such as, for example, a magnetic or optical storage medium. Thus, the operation and behavior of the embodiments are described without specific reference to the actual software code or specialized hardware components. The absence of such specific references is feasible because it is clearly understood that artisans of ordinary skill would be able to design software and control hardware to implement the embodiments of the present invention based on

the description herein with only a reasonable effort and without undue experimentation.

Spec. ¶ 37.

For much the same reasons, we also are not persuaded of Examiner error by Appellants’ argument that the claims “involve a complex **network** of computing devices, configured to generate an interactive system” and “**require** an interlineation of component parts that are **integral to the computer system itself**” (App. Br. 16). Nor are we persuaded by Appellants’ argument that “the claims **particularly and distinctly** recite a manner in which a computer must be programmed to provide the advantages of enabling the recited interactive systems” (*id.*) and “offer **new** advantages that **cannot** be performed by a human substitute” (*id.* at 16–17).

As described above, there is no indication that specialized hardware or “inventive” computer components are required—the Specification clearly suggests otherwise. 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).

Whether the claimed invention can be performed by a “human substitute” also is beside the point. “[R]elying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent-eligible.” *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (citing *Alice Corp.*, 134 S. Ct. at 2359 (“use of a computer to create electronic records, track multiple transactions, and issue simultaneous instructions” is not an inventive concept)).

Appellants maintain that the record does not suggest that the claimed system be implemented “on a **generic, unspecified computer**, as a **generic computer** is **not capable** of performing the functions recited in the present claims” (App. Br. 19). And citing *In re Alappat*, 33 F.3d 1526, 1543 (Fed. Cir. 1994), Appellants argue that “because the recitations of the present claims would require specific programming, the resulting computer would be a **specific purpose** computer” (*id.* at 20; *see also* Reply Br. 5–6).

The difficulty with that argument is that the Federal Circuit, in *Eon Corp. IP Holdings LLC v. AT&T Mobility LLC*, 785 F.3d 616, 623 (Fed. Cir. 2015), explicitly noted that “*Alappat* has been superseded by *Bilski*, 561 U.S. at 605–06, 130 S. Ct. 3218, and *Alice Corp. v. CLS Bank Int’l*, — U.S. —, 134 S. Ct. 2347, 189 L.Ed.2d 296 (2014).” And, as described above, it is clear from the Supreme Court decision in *Alice* that merely implementing an abstract idea on a general purpose computer is not patent-eligible.

We also are not persuaded of Examiner error by Appellants’ argument that the claims provide “a real world, practical application and an improvement on existing technologies, which graphically integrate and display information, enable selective redistribution, effectuate shifting of funds, and provide an indication of portions of accounts that will be consumed by future bill payments” (App. Br. 20–21). Appellants maintain that the claims are analogous to those that the Court upheld as patent-eligible in *Diamond v. Diehr*, 450 U.S. 175 (1981) (*id.*). But we find no parallel between the present claims and those at issue in *Diehr*.

The claims in *Diehr* were directed to a process for curing synthetic rubber, and recited a series of steps (e.g., the loading of a mold with raw,

uncured rubber, closing the mold, constantly determining the mold temperature, constantly recalculating the cure time, 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.

Unlike the process claimed in *Diehr*, which was directed to a specific industrial process, i.e., “a physical and chemical process for molding precision synthetic rubber products,” *id.* at 184, the claims here merely recite a computer-implemented system for displaying and manipulating data, i.e., account balance information, on a graphical user interface.

Graphical user interfaces (“GUIs”) are a standard and common method for users to enter and view information on a computer network. And although Appellants argue that the claims provide “an improvement on existing technologies, which graphically integrate and display information, enable selective redistribution, effectuate shifting of funds, and provide an indication of portions of accounts that will be consumed by future bill payments,” there is no indication in the Specification that any inventive or specialized graphic interface is required; instead, the claims merely recite the use of a generic GUI for displaying and entering information. The recitation of a generic GUI merely limits the use of the abstract idea to a particular technological environment, i.e., online banking, which the Court made clear in *Alice* is insufficient to transform an otherwise patent-ineligible abstract idea into a patent-eligible subject matter. *See Alice Corp.*, 134 S. Ct. at 2358. *See also Affinity Labs of Texas LLC v. DirectTV LLC*, 838 F.3d 1253, 1257–58 (Fed. Cir. 2016) (A mere recitation of a GUI does not make a

claim patent-eligible); *Intellectual Ventures I LLC v. Capital One Bank*, 792 F.3d 1363, 1370 (Fed. Cir. 2015) (“the interactive interface limitation is a generic computer element”).

We are not persuaded, on the present record, that the Examiner erred in rejecting independent claims 1 and 8 under 35 U.S.C. § 101. Therefore, we sustain the Examiner’s rejection.

Dependent Claims 2–7 and 9–14

Dependent claims 2–7 and 9–14 depend from independent claims 1 and 8, respectively. Appellants do not provide any arguments in support of the patent-eligibility of these dependent claims except by reference to Appellants’ argument with respect to claims 1 and 8 (*see* App. Br. 22; *see also* Reply Br. 6).

We are not persuaded, for the reasons set forth above, that the Examiner erred in rejecting independent claims 1 and 8 under § 101. Therefore, we also sustain the Examiner’s rejection of dependent claims 2–7 and 9–14.

DECISION

The Examiner’s rejection of claims 1–14 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