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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROBERT PURDY, TIM MIRECKI, and
PHILIP DALY

Appeal 2017-009934
Application 12/679,920¹
Technology Center 3600

Before DEBRA K. STEPHENS, DANIEL J. GALLIGAN, and
DAVID J. CUTITTA II, *Administrative Patent Judges*.

CUTITTA, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from a final rejection of claims 8, 9, 15, 16, 22, 23, 27, and 34, which are all of the claims pending in the application.² We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Appellants identify Carlton Group Ltd. as the real party in interest. *See* App. Br. 2.

² Claims 1–7, 10–14, 17–21, 24–26, and 28–33 have been cancelled.

STATEMENT OF THE CASE

According to Appellants, the claims are directed to a computer system for managing an incentive program. Abstract.³ Claim 8, reproduced below, is representative of the claimed subject matter:

8. A method of creating and managing incentive programs for a plurality of client organizations, the method comprising:

providing a provider server coupled to a remote communication network, the provider server comprising a processor and a memory storing instructions which, when executed by the processor, cause the processor to be configured to provide an interface that is accessible for inputting information about each of the plurality of client organizations;

the provider server providing a hierarchy module adapted for receiving, from each of the plurality of client organizations via the remote communication network, information concerning the organizational structure of that client organization, the hierarchy module being further adapted to manage said information for each of the plurality of client organizations, said information concerning each client organization being organized into nodes of a data structure editable by selected authorized users from that client organization, with each node corresponding to a structural component or subcomponent in the organizational structure of the client organization, wherein said hierarchy module is further adapted for receiving data concerning personnel of a given client organization of the plurality of client organizations;

the provider server providing an incentive module adapted for receiving and managing information to create and manage one or more incentive programs associated with one or more nodes for each client organization of the plurality of client

³ This Decision refers to: (1) Appellants' Specification filed March 25, 2010 (Spec.); (2) the Final Office Action (Final Act.) mailed September 8, 2016; (3) the Appeal Brief (App. Br.) filed February 2, 2017; (4) the Examiner's Answer (Ans.) mailed May 17, 2017; and (5) the Reply Brief (Reply Br.) filed July 14, 2017.

organizations, wherein said incentive module is further adapted for receiving sales target criteria and one or more rewards for a designated incentive program of the one or more incentive programs, wherein said incentive module is further adapted for associating said sales target criteria with one or more of said personnel, and wherein said sales target criteria includes a plurality of sales targets joined using specified logical operators; and

the provider server providing a permissions module adapted for receiving and managing information concerning the selected authorized users from each client organization of the plurality of client organizations, said information including username and password information for each authorized user, wherein said information indicates that each authorized user is a member of the organizational structure of their respective client organization, and wherein said information is used to determine that each authorized user is permitted to edit the nodes of the data structure for the authorized user's respective client organization; and

the provider server providing an automated invoicing module adapted for automatically issuing invoices to a given client organization of the plurality of client organizations based upon predefined criteria, the predefined criteria comprising a transaction from a first currency provided by the given client organization and a second currency predefined by the provider server, wherein said predefined criteria includes rewards issued to personnel of the given client organization through its respective one or more incentive programs.

REJECTION

Claims 8, 9, 15, 16, 22, 23, 27, and 34 stand rejected under 35 U.S.C. § 101 as directed to patent-ineligible subject matter. Final Act. 2–8.

Our review in this appeal is limited to the above rejection and the issues raised by Appellants. Arguments not made are waived. *See* MPEP § 1205.02; 37 C.F.R. § 41.37(c)(1)(iv).

Principles of Law

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *E.g., Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is “directed to.” *See Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, i.e., the use of a third party to mitigate settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”).

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (1972)). Concepts

determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 192 (1981)); “tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores” (*id.* at 184 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))). In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that “[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 176; *see also id.* at 191 (“We view respondents’ claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula.”). Having said that, the Supreme Court citing *Benson* and *Flook*, also indicated that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* (citations omitted); *see, e.g., id.* at 187 (“It is now commonplace that an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”).

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221 (quotation marks omitted). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to

monopolize the [abstract idea].” *Id.* (quoting *Mayo*, 566 U.S. at 77). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

USPTO January 7, 2019 Revised Section 101 Memorandum

The USPTO recently published revised guidance on the application of § 101. *See* 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019 (“Memorandum”). Under the Memorandum guidance, we first look to whether the claim recites:

(1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes); and

(2) additional elements that integrate the judicial exception into a practical application (see MPEP § 2106.05(a)–(c), (e)–(h)).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (see MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, and conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

ANALYSIS

Appellants argue the claims as a group, proposing claim 8 as a representative claim. *See* App. Br. 9. We select independent claim 8 as exemplary of Appellants’ arguments for claims 8, 9, 15, 16, 22, 23, 27, and 34. *See* 37 C.F.R. § 41.37(c)(1)(iv)(2016).

The Examiner determines the claims are directed to an abstract idea, namely, “incentive programs,” which, according to the Examiner, are a “method of organizing human activities.” Final Act. 2; *see* Ans. 5. The Examiner also determines the claims “do not include additional elements that are sufficient to amount to significantly more than the judicial exception.” Final Act. 2–3; *see* Ans. 5.

Appellants present several arguments against the § 101 rejection. We do not find Appellants’ arguments persuasive, as discussed in greater detail below. The Examiner has provided a comprehensive response to Appellants’ arguments supported by a preponderance of evidence. *See* Ans. 3–6. Thus, we adopt the Examiner’s findings and conclusions. *See* Final Act. 2–9; Ans. 3–6. We analyze the claims under the 2019 Revised § 101 Guidance and adopt the nomenclature for the steps used in the Memorandum.

STEP 1

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. Initially, the Examiner determines, and we agree, that the “claims fall within the four

statutory categories of [i]nvention.” Final Act. 3. Indeed, independent claims 8 and 22 recite methods, independent claim 15 recites a server, and independent claim 27 recites a non-transitory computer readable medium. As such, the claims are directed to statutory classes of invention within 35 U.S.C. § 101, i.e., processes, a machine, and a manufacture.

STEP 2A Prong 1

Under Step 2A, Prong 1 of the Memorandum, we must determine whether claim 8, being directed to a statutory class of invention, nonetheless falls within a judicial exception.

The Examiner determines that claim 8 is directed to a “method of organizing human activities,” namely “incentive programs” (Final Act. 3–4; Ans. 5) and “agreements between people or performance of financial transactions” (Final Act. 6). As such, the Examiner determines claim 8 is directed to an abstract idea. Ans. 5; Final Act. 3, 6.

Appellants argue the Examiner’s characterization of claim 8 “disregard[s] other features of the claim[]” and “also mischaracterizes and overgeneralizes the claim[.]” App. Br. 12–13. In particular, Appellants point out that “the recited hierarchy module in particular” shows the claim is “directed to providing a computer system with a hierarchical data structure that facilitates self-management by users other than an administrator of the computer system itself.” Reply Br. 2; App. Br. 13.

Appellants’ arguments do not persuade us of error in the Examiner’s determination that claim 8 is directed to an abstract idea. Both the Specification and the claim language support the Examiner’s determination that the invention is directed to organizing human activities, namely,

incentive programs. Indeed, the Specification describes the system is provided “to create and manage incentive programs that are specific to . . . client organization[s].” Spec. ¶ 5; *see id.* ¶¶ 1–2. Correspondingly, claim 8 recites “an incentive module adapted for receiving and managing information to create and manage one or more incentive programs” and “an automated invoicing module adapted for automatically issuing invoices . . . based upon predefined criteria, . . . includ[ing] rewards issued . . . through . . . incentive programs.” Appellants ignore the recited incentive program and instead highlight the “hierarchy module” recited in the claim. But the hierarchy module serves to collect and store the information used to implement the incentive program (which we discuss in further detail below) and thus, the hierarchy module simply assists in the implementation of the abstract idea. Moreover, this concept of managing incentive programs is similar to fundamental economic practices, or other types of “organizing human activity” that have been found to be abstract ideas by the Supreme Court and the Federal Circuit. *See, e.g., Alice*, 134 S. Ct. at 2357 (intermediated settlement); *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1361–62 (Fed. Cir. 2015) (offer-based price optimization); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (transaction performance guarantee); and *Planet Bingo, LLC v. VKGS LLC*, 576 Fed.Appx. 1005, 1007 (Fed. Cir. 2014) (managing a game of bingo). From this we conclude that claim 8 recites a method of organizing human activity.

Furthermore, although not relied upon to make our decision, we note that the invention could also be fairly characterized as a mental process. Examining information necessary for determining whether members of an organization, e.g., employees of a business (Spec. ¶ 6), have met incentive

targets, e.g., a number of days without an injury (*id.* Fig. 20), is a process of observation and evaluation which can be fully performed within the mind.

STEP 2A Prong 2

Next, we determine whether the claim is directed to the abstract concept itself or whether it is instead directed to some technological implementation or application of, or improvement to, this concept, i.e., integrated into a practical application. *See, e.g., Alice*, 573 U.S. at 223, discussing *Diehr*, 450 U.S. at 175.

The Examiner determines the claim does not “purport to improve the functioning of the computer itself,” nor does the claim “effect an improvement in any other technology or technical field.” Ans. 6; *see* Final Act. 4, 8. We agree with the Examiner.

Appellants argue “the focus of the claimed advance is in *providing the technical means* by which human database administrators can be relieved of having to perform manual data entry,” specifically highlighting the claimed hierarchy module as the means for doing so. Reply Br. 2; *see* App. Br. 13. As an initial matter, the claim does not recite language limiting or defining how that hierarchy information is received or how administrators are relieved from having to perform manual data entry; therefore, Appellants’ alleged “advance” in data entry is not reflected in the claim. Indeed, the claim only recites that the “hierarchy module” “receiv[es] . . . information concerning the organization structure of [a] client organization,” “receiv[es] data concerning personnel of a given client organization,” and stores that information “into nodes of a data structure,” but does not otherwise describe the claimed data receiving.

Moreover, the “data entry” relief Appellants refer to is still performed manually, just by a different party. The Specification describes that, instead of database administrators — i.e., the provider of the incentive management system — entering information, a “client” — i.e., the user of the incentive management system — “may be able to input their organizational or corporate structure.” Spec. ¶ 21; *see* Spec. ¶ 25. Accordingly, the “advance” highlighted by Appellants is that a different person manually enters information to be stored, which does not improve the functioning of the computer, but instead improves the functioning of the operator providing the incentive management program by reducing costs to the operator. Spec. ¶¶ 3–4 (Previously, “data [were] added to the system by the system operator,” which “involve[d] significant time and effort by the system operator.” The improvement “reduces or eliminates costs to the system operator.”). That is, the improvement described *uses* technology in a conventional way to achieve a business goal, rather than improving technology, and, accordingly, does not confer patent eligibility.

Appellants’ additional argument that the claimed “limitations also solve a technical problem (e.g., restricting access to certain data)” (App. Br. 15; Reply Br. 5) also fails to persuade us the claim is patent-eligible. Appellants’ Specification describes that the ability to restrict access to data is known in the art. Specifically, “[l]ogin screens or windows, as known to those of the skill in the art, may be used. Accessing system 10 may further be by any other method known in the art.” Spec. ¶ 50. Accordingly, restricting access to data is not a technical problem solved by Appellants’ invention because the Specification describes that the solution is already known in the art and uses that solution to implement the invention. Similar

to our discussion above, rather than improving authentication technology, conventional authentication is deployed to implement the incentive program.

In view of Appellants' Specification, and consistent with the Examiner's determinations, claim 8 is not directed to a specific asserted improvement in computer technological implementation or otherwise integrated into a practical application and thus is *directed to* a judicial exception.

STEP 2B

Next, we determine whether the claim includes additional elements that provide significantly more than the recited judicial exception, thereby providing an inventive concept. *Alice*, 53 U.S. at 217 (quoting *Mayo*, 566 U.S. at 72–73).

The Examiner determines the claim recites “the use of generic computing functions to implement the abstract idea” and so “do[es] not provide additional elements that provide significantly more than the abstract idea.” Ans. 5; *see* Final Act. 6–7.

Appellants argue the

specific features of the hierarchy module (to allow editing of the nodes), the permissions module (to determine users to edit the hierarchy) and the remote communication network, work in combination to provide the advantages . . . of enabling a self-managed automated system, in which manual intervention by a provider is not required.

App. Br. 15; Reply Br. 5. Appellants conclude that the limitations, “when taken as an ordered combination, provide unconventional steps that confine the abstract idea to a particular useful application.” App. Br. 15; Reply Br. 5.

We agree with the Examiner’s finding that that the steps of receiving, processing, storing, calculating, and transmitting information are well-understood, routine, and conventional computing functions. *See* Final Act. 6–7. All the claimed steps are performed by “a provider server.” The server provides a number of modules that receive certain information, store information, analyze information, or output information, e.g., information related to organizational structure, personnel, incentive management, sales target criteria, authentication, and rewards. Considering the claimed elements separately, each of these computer functions are generic, routine, and conventional computer activities that are performed only for their conventional uses. *See Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (the “focus of the asserted claims . . . is on collecting information, analyzing it, and displaying certain results of the collection and analysis”); *see also In re Katz Interactive Call Processing Patent Litigation*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) (“Absent a possible narrower construction of the terms ‘processing,’ ‘receiving,’ and ‘storing,’ . . . those functions can be achieved by any general purpose computer without special programming”). None of these activities is used in an unconventional manner nor do any of these activities produce an unexpected result. In short, each step does no more than require a generic computer server (the claimed “provider server”) to perform generic computer functions. As to the information operated upon, “even if a process of collecting and analyzing information is ‘limited to particular content’ or a particular ‘source,’ that limitation does not make the collection and analysis other than abstract.” *SAP America, Inc. v. InvestPic LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018).

Further, considered as an ordered combination, the computer components of Appellants' method claim add nothing that is not already present when the steps are considered separately. Appellants highlight the ordered combination of information receiving and editing. App. Br. 15. But, the sequence of information reception, storage, modification, analysis, and output is generic and conventional or has been otherwise held to be abstract. *See Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*, 876 F.3d 1372, 1378 (Fed. Cir. 2017) (sequence of data retrieval, analysis, modification, generation, display, and transmission), *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (sequence of receiving, selecting, offering for exchange, display, allowing access, and receiving payment recited an abstraction), *Two-Way Media Ltd. v. Comcast Cable Communications, LLC*, 874 F.3d 1329, 1339 (Fed. Cir. 2017) (sequence of processing, routing, controlling, and monitoring). The ordering of the steps is therefore ordinary and conventional. We, thus, conclude that the claim does not provide an inventive concept because the additional elements recited in claim 8 do not provide significantly more than the recited judicial exception.

Accordingly, claim 8 does not recite patent-eligible subject matter; because claim 8 is representative (App. Br. 9), we also conclude that remaining claims 9, 15, 16, 22, 23, 27, and 34 also do not recite patent-eligible subject matter.

DECISION

We affirm the Examiner's rejection of claims 8, 9, 15, 16, 22, 23, 27, and 34 under 35 U.S.C. § 101.

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Application 12/679,920

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 41.50(f).

AFFIRMED