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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DANIEL H. GREENE

Appeal 2018-000615
Application 12/062,823
Technology Center 3600

Before DAVID M. KOHUT, BETH Z. SHAW, and
JAMES W. DEJMEK, *Administrative Patent Judges*.

KOHUT, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–22². We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a) (2015). Appellant identifies the real party in interest as Palo Alto Research Center Incorporated. Appeal Br. 1.

² The rejection of claims 1–22 under 35 U.S.C. § 103(a) has been withdrawn by the Examiner. Ans. 8–13.

INVENTION

The present invention is directed to an activity-based advertising system that manages its auction size. Spec. ¶ 3. Claim 1 is illustrative of the invention and is reproduced below.

1. A computer-implemented method for managing auction size in an activity-based advertising system, the method comprising:

determining, by one or more computers, an auction criterion for delivering an online ad to a user;

responsive to determining that a number of bids received from a plurality of auction participants is not within a predetermined range, revising the auction criterion;

sending the revised auction criterion over a network to the plurality of auction participants;

receiving, from the plurality of auction participants over the network, a new set of bids that satisfy the revised auction criterion; and

in response to determining that a number of the new set of bids is within the predetermined range, presenting the advertisements from a winning bid to a mobile device of the user.

REJECTION

Claims 1–22 stand rejected under 35 U.S.C. § 101 as being directed to ineligible subject matter.³

³ The Final Rejection mailed February 25, 2016 included a rejection of claims 1–22 under 35 U.S.C. § 101; however, the Examiner’s Answer states that the rejection under 35 U.S.C. § 101 is a new ground of rejection. Ans. 3; Final Act. 2–4. In accordance with 37 C.F.R. § 41.41, Appellant has requested to maintain the appeal. Reply Br. i.

ANALYSIS

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)).

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.*

The PTO has published revised guidance on the application of § 101. USPTO’s January 7, 2019 Memorandum, *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 55 (“Memorandum”). Under that 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, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See Memorandum at 50.

Step 2A, Prong 1: “recites a judicial exception”

Under the first step of the *Alice/Mayo* framework, the Examiner determines the claims are directed to the abstract idea of “managing an auction size,” which the Examiner asserts is a fundamental economic practice and a method of organizing human activity. Final Act. 2–3; Ans. 3, 6; *see* Memorandum at 52. The Examiner further asserts that the claimed steps are analogous to the basic concepts of comparing new and stored information to identify options and using categories to organize, store, and transmit information. Ans. 4–6. We agree.

Appellant disagrees and argues that rather than being directed to an abstract idea, “the claims focus on improvements in the technical process of monitoring electronic auction participation and dynamically interacting with remote participant's computing devices to avoid auction participation levels at above or below targeted threshold levels.” Appeal Br. 11; Reply Br. 8.

Under step one of the *Alice* framework, we “look at the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)).

The “directed to” inquiry . . . cannot simply ask whether the claims *involve* a patent-ineligible concept, because essentially every routinely patent-eligible claim involving physical products and actions *involves* a law of nature and/or natural phenomenon Rather, the “directed to” inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether “their character as a whole is directed to excluded subject matter.” *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015).

Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1335 (Fed. Cir. 2016). In other words, the first step of the *Alice* framework “asks whether the focus of the claims is on the specific asserted improvement in [the relevant technology] or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Id.* at 1335–36; *see also* Memorandum at 54–55.

The Specification provides evidence as to what the claimed invention relates to. In this case, the Specification discloses that the invention relates to “advertising systems,” or more specifically, “an activity-based advertising system that manages its auction size.” Spec. ¶ 3. In order to manage the auction size, the Specification states that “[t]he system then determines the quality of auction size and manages the auction size by modifying the auction criteria. The system then presents the advertisements based on the winning bids.” Spec. ¶ 7.

Claim 1 provides further evidence. Claim 1 recites a “method for managing auction size in an activity-based advertising system . . . comprising” “determining . . . that a number of bids received from a plurality of auction participants is not within a predetermined range,” “revising the auction criterion,” “sending the revised auction criterion . . . to a plurality of auction participants,” “receiving . . . a new set of bids,” “determining that a number of the new set of bids is within the predetermined range,” “and presenting the advertisements from the winning bid to a . . . user.” In short, claim 1 recites managing an auction size. Regardless of whether we describe it in terms of a fundamental business practice or a commercial interaction, claim 1 recites the abstract idea of a certain method of organizing human activity. *See* Memorandum at 52. This

is accomplished by initiating the auction/process, receiving information, analyzing the information, modifying the auction criteria, and choosing a winning bid.

We do not find persuasive Appellant’s argument that the claimed invention is not a fundamental economic practice or method of organizing human activities. First, Appellant argues that the claims do not recite any fundamental economic practices such as creating a contractual relationship, hedging, or mitigating settlement risk. Appeal Br. 13. Second, Appellant argues that the claims do not recite a method of organizing human activities because the claims do not recite any concepts relating to interpersonal activities such as managing a game of bingo, tax-free investing, or structuring a sales force. *Id.* However, we note that claims reciting auctions have been determined to be ineligible. *See, e.g., In re Schrader*, 22 F.3d 290 (Fed. Cir. 1994); *see also Priceplay.com, Inc. v. AOL Advert., Inc.*, 83 F. Supp. 3d 577 (D. Del. 2015), *aff’d* 627 F. App’x 925 (Fed. Cir. 2016). Further, an auction is akin to a sales transaction, which is undoubtedly “a fundamental economic practice long prevalent in our system of commerce.” Ans. 6; *see Alice*, 573 U.S. at 219–20.

We are also not persuaded by Appellant’s arguments pertaining to the Examiner’s reliance on *Electric Power Group* and *Content Extraction*. Reply Br. 7–9 (citing *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016), *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014)). The Examiner asserts that the claims are analogous to those found ineligible in *Electric Power Group* and *Content Extraction* because they include “the basic concepts of comparing new and stored information and using rules to

identify options,” and “using categories to organize, store, and transmit information.” Ans. 4–6. Appellant attempts to distinguish the claims by asserting that unlike *Electric Power Group* and *Content Extraction*, the claims go beyond merely collecting and displaying information or extracting and storing information because the claimed invention utilizes a feedback loop and “revises auction criterion to elicit and target number of bids.”

Reply Br. 8.

We are not persuaded by Appellant’s argument because the feedback loop that includes revising auction criterion to elicit and target a number of bids is itself part of managing an auction size. As we noted above, we agree with the Examiner that the claims are directed to “managing an auction size,” which is an abstract idea in the form of a fundamental economic practice which is a method of organizing human activity. *See Memorandum at 52; Ans. 6; Final Act. 2–3.* Accordingly, we conclude the claims recite a fundamental economic practice, which is one of certain methods of organizing human activity identified in the Memorandum, and thus an abstract idea.

Step 2A, Prong 2: “does not integrate that exception into a practical application”

The Examiner asserts that “[t]here is no indication that the combination of elements improve the functioning of a computer or improves any other technology. Their collective functions merely provide conventional computer implementation.” Ans. 7. We agree.

We do not find persuasive Appellant’s argument that “[b]ecause the claims recite improvements in computer capabilities, and the claims are directed to a specific implementation of a solution to a problem in the software arts, Appellants respectfully submit that the claims are not directed

to an abstract idea.” Appeal Br. 13; *see also id.* at 11. Specifically, Appellant asserts, analogizing to *Enfish*, the claims provide an “an improved electronic auction and communication system that analyzes auction participation levels to determine how to elicit the proper responses from remote participants to achieve a target participation rate.” Appeal Br. 12 (citing *Enfish, LLC. v. Microsoft Corp. et al.*, 822 F.3d 1327 (Fed Cir. 2016)). Appellant asserts that this process provides improved efficiency and effectiveness of the bidding process. *Id.* at 12.

To be sure, independent claim 1 does utilize computer components such as a “computer” for determining an auction criterion and a “network” for sending and receiving auction criterion and bids. Both components, however, are used in an ordinary manner, and for their ordinary functions, and we are thus unpersuaded that independent claim 1 recites any improvement to those components themselves. *See* MPEP § 2106.05(a). Claim 1 merely uses the computer to send, receive, and analyze data. Hence, instead of a technical improvement, the claimed steps of adjusting auction criteria to manage an auction merely improve the commercial and business practice of auctioning. Moreover, the improved efficiency and effectiveness is a result of the improved managing of an auction, not on any claimed improvement to technology. Such an improvement does not integrate the abstract idea into a practical application. *See OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (“relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.”).

Step 2B: “well-understood, routine, conventional”

We must now determine whether independent claim 28 recites any elements additional to the abstract idea that are *not* well-understood, routine, or conventional. *See* MPEP § 2106.05(d). We are unable to identify any.

The Examiner asserts:

The claim(s) does/do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the additional elements when considered both individually and as an ordered combination do not amount to significantly more than the abstract idea(s). The claims require the additional limitations of a computer with a processor and a tangible, non-transitory memory. These generic computer components are claimed to perform their basic functions of storing, retrieving, processing, and displaying that are well-understood, routine, and conventional activities which amount to no more than implementing the abstract idea with a computerized programmed system.

Ans. 7. Appellant argues that:

[T]he claimed embodiment is patent eligible because it involves more than simply retrieving and combining data. The claimed system interacts with auction participants in order to achieve a proper balance of auction participation levels appropriate for the electronic auctioning system. The claimed system analyzes and adjusts the criterion for delivering an online ad, and interacts with auction participants in order to achieve a level of participation that is beneficial for both the auction host and the participating companies. Furthermore, the claimed system delivers advertisements from a winning bid to a mobile device over the network.

Appeal Br. 19 (citing *Research Corp. Techs. v. Microsoft Corp.*, 627 F.3d 859, 868–869 (Fed. Cir. 2010)). Appellant further argues that the ordered combination of claim elements “involves the non-conventional arrangement of computing devices.” Reply Br. 10–11 (citing *BASCOM Glob. Internet*

Servs., Inc. v. AT&T Mobility LLC, 827 F.3d 1341, 1349–52 (Fed. Cir. 2016)). Finally, Appellant argues that the withdrawal of the 35 U.S.C. § 103 rejections indicates that the ordered combination of claim elements is not routine and conventional. Reply Br. 13. We are not persuaded by Appellant’s arguments.

Taking the claim elements separately, the function performed by the generic computer at each step is purely conventional. Receiving, analyzing, and transmitting information are basic computer functions, i.e., they are well-understood, routine, and conventional functions previously known to the industry. *See Elec. Power Grp.*, 830 F.3d at 1356 (The claims “do not include any requirement for performing the claimed functions of gathering, analyzing, and displaying in real time by use of anything but entirely conventional, generic technology. The claims therefore do not state an arguably inventive concept”); *see also In re Katz Interactive Call Processing Patent Litig.*, 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.”).

Considered as an ordered combination, the generic computer of Appellant’s method adds nothing that is not already present when the steps are considered separately. For example, claim 1 does not, as discussed above, purport to improve the functioning of the computer itself. Nor does it affect an improvement in any other technology or technical field. Instead, claim 1 amounts to nothing significantly more than an instruction to apply the abstract idea using a generic computer. That is not enough to transform

an abstract idea into a patent-eligible invention. *See Alice*, 573 U.S. at 225–26.

Finally, to the extent Appellant argues the claims necessarily contain an "inventive concept" based on their alleged novelty or non-obviousness over the cited references, Appellant misapprehends the controlling precedent. Although the second step in the *Alice/Mayo* framework is termed a search for an "inventive concept," the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for "an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.'" *Alice*, 573 U.S. at 217–218. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90.

In view of the above, we are not persuaded that the Examiner erred in rejecting claim 1. Claims 2–22 fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

CONCLUSION

We AFFIRM the rejection of claims 1–22 under 35 U.S.C. § 101.

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–22	101	Eligibility	1–22	

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. § 1.136(a)(1)(iv).

AFFIRMED