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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JUSTIN X. HOWE

Appeal 2018-002955
Application 14/038,259
Technology Center 3600

Before ALLEN R. MacDONALD, MICHAEL M. BARRY, and
DAVID J. CUTITTA II, *Administrative Patent Judges*.

BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from a final rejection of claims 1–20, which are all the pending claims. Br. 5; Final Act. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Appellant identifies MasterCard International Incorporated as the real party in interest. Br. 2.

Introduction

Appellant describes the invention as relating “in general to financial services” and, with more particularity, describes that aspects include “deploy[ing] chip-card payment cards to payment cardholders based on their propensity to travel to locations where the use of chip payment cards is dominant.” Spec. ¶ 1.²

Claims 1, 8, and 15 are independent. Claim 1 is representative, shown here with technological limitations emphasized with ***bold italics***:

1. A method comprising:

receiving, ***via a network interface***, payment card transaction data from a merchant bank as part of a non-real time clearing process, the transaction data including a cardholder identifier associated with a customer, addenda for the transaction data, and a vendor;

extracting travel information from the addenda ***with a processor***, the travel information including an anticipated location;

matching the anticipated location, ***with the processor***, against a database of predetermined locations where CHIP-enabled cards are used; and

transmitting to an issuer a message ***via the network interface***, the message informing the issuer of impending travel by the customer when the anticipated location matches against the database of locations where CHIP-enabled cards are used.

Br. 14 (Claims App’x).

Rejection

The Examiner rejected claims 1–20 under 35 U.S.C. § 101 as ineligibly directed to a judicial exception. Final Act. 16–21.

² See also Br. 2–3 (summarizing the technological environment related to the claimed invention).

ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellant’s contentions of reversible error. *See* Br. 5–12. We disagree with Appellant’s conclusions. Instead, as consistent with our discussion below, we adopt the Examiner’s findings and reasons as set forth in the Final Office Action from which this appeal is taken and as set forth in the Answer. We highlight the following for emphasis.

For the § 101 rejection, Appellant argues all pending claims together, *see* Br. 5–12, from which we select claim 1 as representative for all claims, *see* 37 C.F.R. § 41.37(c)(1)(iv).

§ 101 General Legal Framework and the USPTO Guidance

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 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. Pty. Ltd. 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” in *Diamond v. Diehr*, 450 U.S. 175, 191 (1981).

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 (internal citation 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.* (alterations in original) (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 recently published revised guidance on the application of § 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50–57 (Jan. 7, 2019) (“Guidance”). Under the Guidance, we first look, in step one of the *Alice/Mayo* analysis, 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) (“prong one”); and

(2) additional elements that integrate the judicial exception into a practical application (“prong two”) (*see* MPEP § 2106.05(a)–(c), (e)–(h)).³

See Guidance, 84 Fed. Reg. at 52, 55–56. 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 adds “significantly more” under step two of the *Alice/Mayo* analysis, i.e., whether the claim:

(3) adds a specific limitation beyond the judicial exception that are not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See Guidance, 84 Fed. Reg. at 56.

Alice/Mayo Step One, Guidance Step 2A, Prong One
(Does Claim 1 Recite a Patent-Ineligible Concept?)

The Examiner determined claim 1 recites

the abstract idea of receiving payment card transaction data, extracting travel information from an addenda, matching the anticipated location against a database of predetermined locations where CHIP-enabled cards are used, and transmitting to an issuer a message via a network informing the issuer of impending travel by the customer when the anticipated location matches against the database of locations where CHIP-enabled cards are used.

Final Act. 3. We agree with the Examiner that claim 1 recites this described functionality and, as further discussed below, that claim 1 thereby recites an abstract idea.

We find unpersuasive Appellant’s arguments that the rejection “rests on an overly broad extrapolation of the recited subject matter, excludes key aspects of the claims, [and] ignores the details of the data and hardware

³ All references to the MPEP are to Rev. 08.2017 (Jan. 2018).

components recited in the claims.” Br. 7. The Examiner’s determined abstract idea synthesizes particular functionality from each of the four steps of claim 1—the Examiner’s determination is appropriate under the first step of the *Alice/Mayo* analysis. It is routine (and proper here) at step one to view the claim functionality without recited hardware components such as “via a network interface” and “with a processor” which, as discussed below, are generic and merely used for their routine purposes, without any further technology related limitations.

Certainly, we must “be careful to avoid oversimplifying the claims’ by looking at them generally and failing to account for the specific requirements of the claims.” *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016) (quoting *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016)). Here, the Examiner’s determination complies with that caveat. Each of the four steps of claim 1 recites limitations that describe activities that are part of the above-described abstract idea. In particular, the following recitations in claim 1 describe actions that are part of that idea:

[1] receiving . . . payment card transaction data from a merchant bank as part of a non-real time clearing process, the transaction data including a cardholder identifier associated with a customer, addenda for the transaction data, and a vendor;

[2] extracting travel information from the addenda [that includes] an anticipated location;

[3] matching the anticipated location against a database of predetermined locations where CHIP-enabled cards are used;⁴ and

⁴ Regardless that there is a technological aspect to “CHIP-enabled cards,” as recited, this claim limitation recites the idea of matching an identified

transmitting to an issuer a message . . . informing the issuer of impending travel by the customer when the anticipated location matches against the database of locations where CHIP-enabled cards are used.

The first step is a “non-real time” process limitation for receiving information about a transaction that identifies vendor and the customer along with “addenda” from which, in the second step, “an anticipated location” is extracted. The third and fourth steps alert an issuer when the anticipated location is somewhere that “CHIP-enabled cards are used.” The Examiner’s determination that claim 1 recites the abstract idea as described by the Examiner in the final rejection is tethered to the claim language, because each of the four steps includes actions that are reflected in the articulated abstract idea.

We agree with the Examiner’s determination that claim 1 is sufficiently similar to other precedent in which such claims have been held ineligibly directed to abstract ideas that humans can perform (e.g., using pen and paper). *See* Final Act. 3–4 (citing *Cyberfone*⁵ and *SmartGene*⁶); *see also* Ans. 3 (determining the “abstract idea is similar to concepts involving human activity related to commercial practices (citing *Ultramercial*⁷)). Thus, claim 1 recites a judicial exception in the category of a mental process. *See* Guidance, 84 Fed. Reg. at 52; *see also, e.g., CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1371–72 (Fed. Cir. 2011) (concluding

location with locations where particular types of devices may be used, without any reference to the technology of the devices (or other technology).

⁵ *Cyberfone Systems, LLC v. CNN Interactive Group, Inc.*, 558 F. App’x 988 (Fed. Cir. 2014).

⁶ *SmartGene, Inc. v. Advanced Biological Laboratories, SA*, 555 F. App’x 950 (Fed. Cir. 2014).

⁷ *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709 (Fed. Cir. 2014).

claims directed to “detecting credit card fraud based on information relating to past transactions” can be performed in the human mind and were drawn to a patent-ineligible mental process).

Because the claim recites a judicial exception, we next determine whether the claim integrates the judicial exception into a practical application. Guidance, 84 Fed. Reg. at 54.

Alice/Mayo Step One, Guidance Step 2A, Prong Two
(Does Claim 1 Integrate the Abstract Idea into a Practical Application?)

To determine whether the judicial exception is integrated into a practical application, we identify whether there are “*any additional elements recited in the claim beyond the judicial exception(s)*” and evaluate those elements to determine whether they integrate the judicial exception into a practical application. 84 Fed. Reg. at 54–55 (emphasis added); *see also* MPEP § 2106.05(a)–(c), (e)–(h).

Here, the computer-related recitations such as “via a network interface,” and “with a processor” (and a “database,” although there is nothing technical per se about the recitation of a database) add a certain level of specificity to the claim, but none of these computer limitations serves to improve a technology or technical field. Those recitations constitute routine uses of those technologies to automate the underlying business method. Thus, they do not constitute an improvement to “the functioning of the computer itself” or “any other technology or technical field.” *See* MPEP § 2106.05(a) (quoting *Alice*, 573 U.S. at 225). Neither do these computer limitations qualify as applying the judicial exception with “a particular machine,” because these components provide their conventional functions and require no more than general purpose computer equipment. *See* MPEP

§ 2106.05(b); *see also Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709,716-17 (Fed. Cir. 2014); *TLI Communications LLC v. AV Automotive LLC*, 823 F.3d 607, 613 (Fed. Cir. 2016) (explaining that mere recitation of concrete or tangible components is not an inventive concept).

Similarly, the specific use of “a database of predetermined locations where CHIP-enabled cards are used” does not serve to integrate the abstract idea into a practical application. Such specificity does not confer patent eligibility. The Supreme Court has “rejected the argument that ‘implement[ing] a principle in some specific fashion’ will ‘automatically fal[l] within the patentable subject matter of § 101.’” *Alice*, 573 U.S. at 222 (quoting *Flook*, 437 U.S. at 593).

Appellant’s arguments similarly do not persuade us that claim 1 effects a particular transformation of the recited articles, which are simply used for their ordinary purposes, or that it adds any other meaningful (technological) limitations, i.e., limitations beyond simply “linking the use” of the abstract idea to generic technology. *See* MPEP § 2106.05 (c), (e)–(f); *see also id.* at (g)–(h) (use of well-known limitations beyond the judicially excepted matter constitutes “insignificant extra-solution activity” (g) and claim limitations “merely indicating a field of use or technological environment in which to apply a judicial exception do not amount to significantly more” (h)).

Appellant’s arguments based on *DDR Holdings*⁸ and related precedent are unpersuasive. *See* Br. 9–12. The patent-eligible claim at issue in *DDR Holdings* recited limitations for providing a composite web page based on a web link activation occurring at a remote computer, thereby addressing “a

⁸ *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014).

challenge particular to the Internet.” *DDR Holdings*, 773 F.3d at 1257–58 (explaining that “[w]e caution, however, that not all claims purporting to address Internet-centric challenges are eligible for patent.”). Unlike the patent eligible claim in *DDR Holdings*, in which the recited technological limitations were specific and sufficed to confer eligibility, Appellant’s recited technological limitations are completely generic. *See, e.g.*, Spec. ¶¶ 25, 36, 49 (describing as generic the technological components used to implement embodiments of the described (and claimed) method(s)).

Appellant’s contention that claim 1 “addresses the network-centric challenge of providing CHIP-enabled payment cards, by providing a solution that is necessarily rooted in computer technology” (Br. 10) is, for the foregoing reasons, unpersuasive. This contention is also unpersuasive as not commensurate with the scope of claim 1, which includes no limitations that correspond to “providing CHIP-enabled payment cards,” as argued by Appellant.

Accordingly, because the recited judicial exception is not integrated into a practical application, the Examiner did not err in determining claim 1 is directed to an abstract idea.

Alice/Mayo Step Two; Guidance Step 2B

In step two of the *Alice/Mayo* analysis, we consider whether there are additional limitations that individually, or as an ordered combination, ensure the claims amount to “significantly more” than the abstract idea. *Alice*, 573 U.S. at 217–18 (citing *Mayo*, 566 U.S. at 72–73, 77–79). As stated in the Guidance, many of the considerations to determine whether the claims amount to “significantly more” under step two of the *Alice* framework are already considered as part of determining whether the judicial exception has

been integrated into a practical application. Guidance, 84 Fed. Reg. at 56. Thus, at this point of our analysis, we determine if claim 1 adds a specific limitation, or combination of limitations, that is not well-understood, routine, conventional activity in the field; or whether it simply recites well-understood, routine, conventional activities at a high level of generality. *Id.*

Here, Appellant's claims do not recite specific limitations (or a combination of limitations) that are beyond what was well-understood, routine, and conventional. The Examiner finds, and we agree, that beyond the limitations for the judicial exception, the technological limitations recited in claim 1 constitute the use technology that was well known to those of ordinary skill prior to the invention. Final Act. 4; *see also* Ans. 4–5. The disclosure in Appellant's Specification of the claimed technological features is at a generic level. *See* Spec. ¶¶ 25, 36, 49; *see also* Figs. 1–2. There is no discussion of any special functionality or considerations for a technological aspect of any technological component recited in claim 1. For example, claim 1's method uses the processor for extracting travel information and matching an anticipated location of the travel information against a database. The Examiner finds that the processor is well-understood, routine, and conventional. *See* Final Act. 4. We agree with the Examiner because using a computer “only for its most basic function, the performance of repetitive calculations,” as in Appellant's claim 1, may not impose meaningful limits on the claim's scope. *Bancorp Servs. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012). Similarly, the MPEP instructs examiners that courts recognize that using a computer for performing repetitive calculations may be well-understood, routine, and conventional

when claimed generically. MPEP § 2106.05(d)(II)(ii) (citing *Flook*, 437 U.S. at 594; *Bancorp*, 687 F.3d at 1278).

Appellant contends claim 1’s recited elements “provid[e] a technical solution that is neither conventional nor routine” and “is novel and non-obvious.” Br. 10 (also contending claim 1 “overcomes a problem that has arisen in updating a computer model”); *see also id.* at 11–12. This argument is unpersuasive. “The ‘novelty’ of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.” *Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981). “It has been clear since *Alice* that a claimed invention’s use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention ‘significantly more’ than that ineligible concept.” *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018). A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent ineligible. *See Mayo*, 566 U.S. at 90.

Appellant’s contention that claim 1 “overcome[s] a problem that has arisen in updating a computer model” (Br. 10) is unpersuasive because Appellant provides no explanation for either *what* the computer model problem is or *how* claim 1 addresses any such problem. Attorney arguments and conclusory statements that are unsupported by factual evidence are entitled to little probative value. *See In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997); *see also* Ans. 4–5.

For the reasons discussed *supra*, we are unpersuaded of Examiner error. Accordingly, we sustain the Examiner’s rejection of claims 1–20 under 35 U.S.C. § 101.

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Application 14/038,259

DECISION

We affirm the Examiner's rejection under 35 U.S.C. § 101 of claims 1–20.

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