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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GUY LEMONTE McCLUNG III

Appeal 2018-002162
Application 13/788,597¹
Technology Center 3600

Before ALLEN R. MacDONALD, JASON V. MORGAN, and
IRVIN E. BRANCH, *Administrative Patent Judges*.

BRANCH, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from a final rejection of claims 1, 3–5, 7, 9, 10, 12, 14, 16, 17, and 21, which are all of the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

Technology

According to Appellant’s Specification, the subject matter “relates to improvements to business systems with which a customer can be in direct electronic communication with a vendor” such that the consumer is “assured that an item purchased will not be sold in the near future at a discount or sale price which is not made available to the consumer.” Spec. ¶ 2.

¹ According to Appellant, the real party in interest is S. AQUA SEMICONDUCTOR, LLC. Br. 2.

Illustrative Claim

Claims 1, 3–5, 7, 9, 10, 12, 14, 16, 17, and 21 are pending. Claim 1 is reproduced below for reference.

1. A method comprising:

receiving, by a merchant computer of a merchant, encrypted transaction information from an online store hosted by a third party Internet Service Provider (ISP);

decrypting, by the merchant computer, a session key using a private key of the merchant;

decrypting the encrypted transaction information using the session key;

recording, by the merchant computer, the transaction information, wherein the transaction information includes information associated with each of:

a consummated transaction related to a purchase of an item or a purchase of a service; and

a consumer associated with the purchase of the item or the purchase of the service;

monitoring, by the merchant computer, an incentive associated with purchasing the item or with purchasing the service, wherein the incentive is associated with the consumer, wherein monitoring includes receiving information associated with the incentive from the online store;

comparing, by the merchant computer, the incentive with the transaction information to determine whether the incentive was utilized in association with the consummated transaction; and

in response to determining that the incentive was not utilized in association with the consummated transaction, duplicating, by the merchant computer, the incentive after occurrence of the consummated transaction,

wherein the transaction information includes a purchase price for the item or service, and further comprising:

noting any price lower than the purchase price;
calculating a money-value difference between the purchase price and said any price lower than the purchase price; and
refunding the money-value difference to an account of the consumer.

Rejection²

Claims 1, 3–5, 7, 9, 10, 12, 14, 16, 17, and 21 stand rejected under 35 U.S.C. § 101 because the claims are directed to a judicial exception to patent eligibility. Final Act. 2–4.

ANALYSIS

We have considered in this Decision only those arguments Appellant actually raised in the Brief. Any other arguments Appellant could have made but chose not to make in the Brief are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2016).

A. Section 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. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[I]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) (internal quotation marks and citation omitted).

² Rather than repeat the Examiner’s positions and Appellant’s arguments in their entirety, we refer to the above mentioned Appeal Brief filed May 16, 2017 (“Br.”), as well as the following documents for their respective details: the Final Rejection mailed December 28, 2016 (“Final Act.”) and the Examiner’s Answer mailed October 25, 2017 (“Ans.”).

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 [of] rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 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 187; *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 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.* (citing *Benson* and *Flook*); *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 (internal 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.*

B. USPTO Section 101 Guidance

The United States Patent and Trademark Office (USPTO) recently published revised guidance on the application of § 101. USPTO’s January 7, 2019 Memorandum, *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (“Memorandum”). Under that guidance, we first look to whether the claim recites:

(1) (*see* Memorandum Step 2A — Prong One) 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) (*see* Memorandum Step 2A — Prong Two) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)).³

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 Step 2B.

C. Examiner’s § 101 Rejection — Alice/Mayo — Steps 1 and 2

C.1. USPTO Memorandum Step 2A — Prong One

Applying step 1 of the *Alice/Mayo* analysis, the Examiner concludes claim 1 is directed to an abstract idea.

Specifically, the Examiner determines the claims are directed to the abstract idea “monitoring an incentive associated with consummating a transaction.” Final Act. 2 (comparing the claims to those found patent ineligible in *SmartGene, Inc. v Advanced Biological Labs.*, 555 F. App’x 950 (Fed. Cir. 2014)).

³ We acknowledge that some of these considerations may be properly evaluated under Step 2 of *Alice* (Step 2B of Office guidance). Solely for purposes of maintaining consistent treatment within the Office, we evaluate it under Step 1 of *Alice* (Step 2A of Office guidance). *See* Memorandum.

C.2. USPTO Memorandum Step 2A — Prong Two

Applying step 2 of the *Alice/Mayo* analysis, the Examiner determines:

The claim(s) does 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 a combination do not amount to significantly more than the abstract idea. The claims recite the additional elements of receiving encrypted transaction information and decrypting the transaction information using a key. The claims['] steps do not recite a specialized algorithm that could move the claims from the abstract to the concrete, and a computer that simply executes an abstract concept does not render a particular machine or specialized computer.

Final Act. 3.

C.3. USPTO Memorandum Step 2B

Further applying step 2 of the *Alice/Mayo* analysis, the Examiner determines:

The use of private keys and session keys for encrypting/decrypting information is nothing more than programming conventional software or hardware to apply rules and instructions for determining when to transmit the promotions is a routine, conventional practice. The introduction of a generic element, such as device or computer (processor) into a method, apparatus, or article claim, has been deemed insufficient by the Supreme Court to transform a patent-ineligible claim into one that is patent-eligible, and it fails to do so here as well. *See Alice*, [573 U.S. at 223]. Here, the claims at most appl[y] conventional computer technology to determine if the incentive was utilized in association with the consummated transactions. Accordingly, the recited claim limitations, both individually and as an ordered combination, fail to transform the nature of the claim into a patent-eligible application.

Final Act. 3–4 (emphasis added).

D. Appellant's § 101 Arguments

Appellant contends the claims solve a technological problem (“First contention,” Br. 13–15), the Examiner has not considered the claims in their entirety (“Second contention,” *id.* at 15), the claims include steps that cannot be done mentally (“Third contention,” *id.*), the claims do more than comparing and using rules to identify options (“Fourth contention,” *id.* at 16), the claims do not seek to tie up a judicial exception such that others cannot practice it (“Fifth contention,” *id.* at 16), and the claims amount to “significantly more” than simply instructing a practitioner to implement an abstract idea on a generic computer (“Seventh contention,” *id.* at 17). Appellant also contends that “Claim 21 captures inventive concepts of the present application in a format that has received approval under an analysis of 35 U.S.C. 101 by the Federal Circuit and the PTO.” *Id.* at 17–20.

E. Panel's § 101 Analysis

We agree with the Examiner that the claims are directed to an abstract idea. The abstract idea identified by the Examiner, “monitoring an incentive associated with consummating a transaction” (Final Act. 2) amounts to a certain method of organizing human interactions such as a fundamental economic practice. *See* Memorandum Step 2A — Prong One; *Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611. Ensuring that a consumer is credited with an incentive for a purchase transaction is an inducement for the customer to engage in future transactions with the merchant, which amounts to marketing. The claim limitation relating to decrypting a session key and transaction information (“[wherein] the merchant computer [decrypts] a session key using a private key of the merchant [and decrypts] the encrypted transaction information using the session key”) does not recite any particular

level of complexity such that the function could not be carried out by a human unaided by computer.

Thus, we find Appellants' First, Second, Third, and Fourth contentions are unpersuasive of error. Br. 13–16. Appellant's First contention is unpersuasive because the claims are directed to a business problem, not a technical problem. Appellant does not purport to have invented decryption or its use in online commerce. *See, e.g.*, Spec. ¶ 121 (“An example asymmetric algorithm is the well-known RSA cryptographic algorithm named for the creators Rivest, Shamir, and Adleman.”). Automating the marketing process of “monitoring an incentive associated with consummating a transaction” is not a solution rooted in technology. Appellant's Second contention is unpersuasive because Appellant does not explain what additional limitations, if considered, would have changed the nature of the abstract idea. Br. 15. We are not persuaded by Appellant's Third contention because Appellant provides no support for the assertion that using a decryption key to decrypt information “cannot be done by ‘mental processes.’” *Id.* To whatever extent Appellant correctly argues that the claims do more than comparing and using rules to identify options (Fourth contention, *id.* at 16), the claims amount to collecting information and analyzing it, which is also an abstract idea, when claimed in a certain way. *See* Ans. 2–3 (citing *Electric Power Group, LLC v. Alstom*, 830 F.3d 1350 (Fed. Cir. 2016)).

We also agree with the Examiner's determination that the claims do not recite additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)). Simple decryption—even multiple levels of decryption as here—is not a function

reserved exclusively to computer implementation but rather may be performed in the human mind without the aid of technology. Mere automation of manual processes or increasing the speed of a process where these purported improvements come solely from the capabilities of a general-purpose computer are not sufficient to show an improvement in computer-functionality. See *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1095 (Fed. Cir. 2016). Thus, Appellant’s Fifth contention is unpersuasive because we do not find a streamlined analysis is in order. Appellant’s Sixth contention is unpersuasive because we are persuaded that the claims are directed to an abstract idea. We are unpersuaded by Appellant’s Seventh contention because novelty and non-obviousness are not the tests for whether limitations are directed to what is “well understood, routine, and conventional,” and, as the Examiner correctly points out, the claims do not purport to improve the functioning of the computer itself. Br. 17; Ans. 3–4. See, e.g., Spec. ¶ 126 (“The host computer is a general purpose computing device in the form of a conventional personal computer 270 that is configured to operate as a network server (in the case of the merchant and ISP computers)”; Spec. ¶ 120 (describing the “order decryptor” as commercially-available, third-party software).

We are not persuaded by Appellant’s separate argument regarding claim 21, which notes “the close correspondence of the claim formats” which comparing claim 21 to a claim held to be “rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” Br. 17. We know of no controlling case law that bases such a determination on claim format.

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Accordingly, we sustain the Examiner's rejection of claims 1, 3–5, 7, 9, 10, 12, 14, 16, 17, and 21 because the claims are directed to patent-ineligible subject matter.

DECISION

For the reasons above, we affirm the Examiner's decision rejecting claims 1, 3–5, 7, 9, 10, 12, 14, 16, 17, and 21.

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