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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte FREDERIC BAUCHOT, GERARD MARMIGERE, and
JOAQUIN PICON¹

Appeal 2018-002549
Application 13/907,082
Technology Center 3600

Before HUBERT C. LORIN, JOSEPH A. FISCHETTI, and
MEREDITH C. PETRAVICK, *Administrative Patent Judges*.

PETRAVICK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant seeks our review under 35 U.S.C. § 134(a) of the final rejection of claims 1–19 and 21. Claim 20 has been canceled.

We have jurisdiction under 35 U.S.C. § 6(b).

¹ The real part in interest is International Business Machines Corporation.

SUMMARY OF DECISION²

We REVERSE.

THE INVENTION

Claim 1, reproduced below, is illustrative of the claimed subject matter on appeal.

1. A method of using a public network and a cellular network to send and receive specified information to order and pay for an article, said method comprising:

a customer using a computer to send an order for an article through the public network to a commercial server;

said commercial server sending a short message service (SMS) message, through the cellular network, from said commercial server to an SMS terminal, said SMS message including a redirect routing number and an encryption key;

said customer, by using said SMS terminal, adding to said SMS message information enabling identification of a customer payment means;

encrypting, by using said encryption key, said information in the SMS message; and

the SMS terminal, by using said redirect routing number, redirecting the SMS message, with said encrypted information therein, through said cellular network, from said SMS terminal to a payment server.

² Our Decision will make reference to Appellant's Appeal Brief ("App. Br.," filed Oct. 11, 2017), Appellant's Reply Brief ("Reply Br." filed Jan. 5, 2018), the Final Office Action ("Final Act.," mailed Mar. 13, 2017), and the Examiner's Answer ("Ans.," mailed Nov. 7, 2017).

THE REJECTION

Claims 1–19 and 21 are rejected under 35 U.S.C. § 101 for claiming patent-ineligible subject matter. *See* Final Act. 8.

ISSUE

Did the Examiner err in rejecting claims 1–19 and 21 under 35 U.S.C. §101 for claiming patent-ineligible subject matter?

ANALYSIS

An invention is patent-eligible if it is 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. 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” (*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 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 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 (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.* (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 (Jan. 7, 2019) (“2019 Guidance”). Under the 2019 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* MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) § 2106.05(a)–(c), (e)–(h) (9th Ed., Rev. 08.2017, Jan. 2018)).

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 2019 Guidance.

Claims 1–19

Appellant argued claims 1–19 as a group. *See* App. Br. 10. In accord with Appellant’s discussion, we select claim 1 as the representative claim for this group, and the remaining claims 2–19 stand or fall with claim 1. 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner contends that the claim 1 “[is] directed to the abstract idea of a system, and a series of steps for conducting a financial transaction . . . , which is a fundamental economic practice, as well as a method of organizing human activities, and thus an abstract idea.” Final Act. 8; *see also* Ans. 6 (“the instant application is directed to conducting a financial transaction . . . which is an abstract idea). The Examiner also asserts that the claimed elements

when considered both individually and in combination do not affect an improvement to another technology or technical field; the claims do not amount to an improvement to the functioning of a computer itself; and the claims do not move beyond a general link of the use of an abstract idea to a particular technological environment.

Ans. 4; *see also* Final Act. 5 (“the focus of the claims is not on an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.”).

Appellant responds that “the Examiner has not properly determined what the claims are directed to” and that “[t]he Examiner has oversimplified the claims and downplayed the invention’s benefits.” App. Br. 12–13; Reply Br. 2–4. Appellant asserts:

when the claims are considered as a whole, in light of the specification, the claims are directed to using computer technology, including a customer computer, a commercial server, a short message terminal, and a payment server, to order an article and to enable payment for the article in a unique way so that confidential information such as a customer credit card number, does not have to be sent over the public network. Such action does not describe an abstract concept, or a concept similar to those found by the courts to be abstract, such as a fundamental economic practice, a method of organizing human activity, an idea itself, or a mathematical relationship.

App. Br. 12.

We consider the claim as a whole giving it the broadest reasonable construction as one of ordinary skill in the art would have interpreted it in light of the specification at the time of filing. 2019 Guidance, 52 n.14 (If a claim, under its *broadest reasonable interpretation . . .*”) (emphasis added). 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); *see also Diehr*, 450 U.S. at 188 (“In determining the eligibility of respondents’ claimed process for patent

protection under § 101, their claims must be considered as a whole.”).

When considered as whole, we agree with Appellant that claim 1 recites subject matter directed to an improvement to technology. In particular, claim 1 recites steps of 1) using a computer to send an order through the public network to a commercial server; 2) sending a SMS message, through the cellular network, to an SMS terminal, the SMS message including a redirect routing number and an encryption key; 3) adding to said SMS message information enabling identification of a customer payment means; 4) encrypting the information in the SMS message; and 5) redirecting the SMS message through said cellular network to a payment server. These recited steps are focused on an improvement to technology — a method of using networking and in an improved way to secure confidential information, such as payment information for an order.

Consistent with claim 1, the Specification also describes the invention as an improvement to technology. The Specification describes that a problem with placing orders and sending credit card numbers to a commercial entity over a public network or by SMS messages is hacking. Spec. ¶¶ 3–5. The invention solves this problem by not requiring the customer to send a credit card number to a commercial entity, but instead using a payment server that obtains payment information via an exchange of encrypted SMS messages. *See id.* ¶¶ 6–10, 50–53.

We acknowledge that claim 1 includes recitations related to a financial transaction. These recited elements relate to the content of the information being exchanged. Specifically, claim 1 recites that the method is for “send[ing] and receiv[ing] specified information to order and pay for an article,” the customer sends “an order for an article” and adds

“information enabling identification of a customer payment means. The financial transaction is not the focus of claim 1 or the invention, and characterizing claim 1 as merely directed to the content of the exchanged information, without accounting for the other claim elements, overgeneralizes the claim. *See Thales Visionix Inc. v. U.S.*, 850 F.3d 1343, 1347 (Fed. Cir. 2017) (“[w]e must therefore ensure at step one that we articulate what the claims are directed to with enough specificity to ensure [that] the step one inquiry is meaningful.”).

The Examiner determined that claim 1 was directed to an abstract idea, a fundamental economic practice, based on their interpretation that claim 1 was directed to a financial transaction. *See* Ans. 3–4. As explained above, claim 1 is not directed to financial transaction but to an improvement to technology— a method of using networking and in an improved unique way to secure confidential information, such as payment information for an order. Claim 1’s improvement to technology is subject matter that does not falls within the enumerated groupings of abstract ideas; that is “Mathematical concepts,” “Certain methods of organizing human activity,” and “Mental processes.” *See* 2019 Guidance, 54. Specific asserted improvements, when claimed, can render claimed subject matter not directed to an abstract idea. *Cf. McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1316 (Fed. Cir. 2016) (“When looked at as a whole, claim 1 is directed to a patentable, technological improvement over the existing, manual 3–D animation techniques.”).

In any case, even if claim 1 was directed to an abstract idea, the claimed steps enumerated 1–5 above, reflect an improvement to technology, which integrates the abstract idea into a practical application. *See* 2019

Guidance, 55 (considering whether “[a]n additional element reflects . . . an improvement to other technology or [a] technical field.”).

For the foregoing reasons, the Examiner’s determination under *Alice* step one is not sustainable. Consequently, we do not reach the merits of the Examiner’s determination under *Alice* step two. *See* 2019 Guidance, 54.

Accordingly, we do not sustain the rejection of claim 1, and claims 2–19 dependent thereon, under 35 U.S.C. § 101 as being directed to patent ineligible subject matter.

Claim 21

Appellant separately argues the rejection of claim 21. App. Br. 10. Claim 21 depends from claim 1, and the Examiner relied upon the same reasoning used to reject claim 1 to reject claim 21. *See* Final Act. 9. Accordingly, we also do not sustain the rejection of claim 21 under 35 U.S.C. § 101 as being directed to patent ineligible subject matter.

DECISION

We do not sustain the rejection of claims 1–19 and 21 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

REVERSED