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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* ALAN P. ROMAN

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Appeal 2018-002351<sup>1</sup>  
Application 11/965,494  
Technology Center 3600

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Before MURRIEL E. CRAWFORD, MICHAEL W. KIM, and  
PHILIP J. HOFFMANN, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

This is an appeal from the final rejection of claims 1–6, 14, 16, 18–23, 25, and 29–31. We have jurisdiction to review the case under 35 U.S.C. §§ 134 and 6.

The invention relates generally to processing a payment transaction. Spec. ¶ 1.

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<sup>1</sup> The Appellant identifies MasterCard International Inc. as the real party in interest. Appeal Br. 1.

Claim 1 is illustrative:

1. A method for electronically converting, in real time, a payment transaction initiated via a check into a debit card transaction, the method implemented using a point of sale (POS) computing device being in communication with a debit switch computer device via a member interface processor (MIP) computing device, the POS computing device being communicatively coupled to a memory device and a scanning device, said method comprising:

electronically capturing at the POS computing device using the scanning device, check data from the check used in the payment transaction, wherein the check data includes an issuing bank routing number and an account number associated with an account;

electronically converting the payment transaction via the check into the debit card transaction by i) electronically querying, by the POS computing device and using the issuing bank routing number, a lookup database table stored within the memory device, ii) determining, by the POS computing device, based on the querying, a bank identification number (BIN) that corresponds to the issuing bank routing number, and iii) generating, by the POS computing device, a debit card number, including generating a predefined quantity of characters comprising the identified BIN and at least one additional character;

generating a debit authorization request message that includes the debit card number and check data, including

formatting the check data and the debit card number into a format usable by the debit switch computer device;  
transmitting the debit authorization request message via the MIP computing device to the debit switch computer device;  
receiving an authorization response from the debit switch computer device via the MIP computing device; and  
completing the payment transaction that was initiated via the check as the debit card transaction in real time.

The Examiner rejected claims 1–6, 14, 16, 18–23, 25, and 29–31 under 35 U.S.C. § 101 as directed to ineligible subject matter in the form of abstract ideas.

We AFFIRM.

#### 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)). 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 192 (“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 (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 recently published revised guidance on the application of § 101. USPTO’s January 7, 2019 Memorandum, *2019 Revised Patent Subject Matter Eligibility Guidance* (“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 are 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, 84 F.R. 50 (2019).

Claim 1 recites steps that gather information, convert the information to different information, package and transmit the information, receive a response based on the transmitted information, and use a positive response as an indication to complete a sale, as a method of conducting a payment transaction. This corresponds to the Examiner’s finding that the claims are directed to processing a payment transaction at a point of sale. Final Act. 3. Because the claim is directed to the performance of financial transactions, it is thus directed to an abstract idea. *See* MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) § 2106.04(a)(2)(I)(A). In addition, other than using processing devices, the method could be performed mentally by a person looking at and communicating the information. *See id.* at (III)(A)–(B).

The method does not integrate the abstract idea into a practical application. For example, the method does not improve the underlying computer by establishing and enforcing price limits, because any processor can be used to execute the claimed method. *See* Spec. ¶ 18 (“a processor may include any programmable system”). In addition, the method is directed to payment transactions, and as such the claimed method does not improve another technology. *See* MPEP § 2106.05(a). Because a particular computer is not required, the claim also does not define or rely on a “particular machine.” *See id.* at (b). Further, the method does not transform matter. *See id.* at (c). Instead, the claim merely gathers, converts, transmits,

and receives data. As such, the method has no other meaningful limitations (*see id.* at (e)), and thus merely recites instructions to execute the abstract idea on a computer (*see id.* at (f)).

The only elements, beyond the abstract idea of gathering, generating, sending, and receiving data within the processing of a payment transaction, are various “computing devices” (a point of sale computing device, in communication with a debit switch computer device, and a member interface processor (MIP) computing device), using general purpose computer servers and any communications network. Spec. ¶ 25. The operations of storing, analyzing, receiving, and writing data are primitive computer operations found in any computer system. *See In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011). Thus, the only additional elements beyond the abstract idea are well-understood, routine, and conventional. *See* MPEP ¶ 2106.05(d).

“[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible. The bare fact that a computer exists in the physical rather than purely conceptual realm is beside the point.” *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (internal citations and quotation marks omitted). Here, independent claims 14, 18, and 22 merely recite system, device, and medium that comprise processors configured to execute instructions that correspond to the steps of method claim 1. Independent claims 14, 18, and 22 thus also are directed to abstract ideas. The Examiner finds the dependent claims are also directed to abstract ideas. Final Act. 5.

Thus, the claims are directed to abstract ideas, and do not recite limitations that transform the abstract ideas into eligible subject matter.

We are not persuaded by the Appellant's arguments, citing *McRO, Inc. v. Bandai Namco Games Am.*, 837 F. 3d 1299 (Fed. Cir. 2016), that the claims recite eligible subject matter because they recite a particular automated process, which is a concrete application of specific and unique processes. Appeal Br. 9–12; *see also* Reply Br. 2–3. No matter how particular, concrete, or specific, the claims involve only gathering, looking up, altering, assembling, sending, and receiving data as part of initiating a payment transaction, and are thus directed to abstract ideas.

We also are unpersuaded by the Appellant's argument that the claims do not preempt other methods of performing payment transactions, especially where, as in dependent claim 5, a specific type of data is added to the data in the message. Appeal Br. 12–13; *see also* Reply Br. 4. While preemption may signal patent-ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (“Where a patent's claims are deemed only to disclose patent ineligible subject matter under the Mayo framework, as they are in this case, preemption concerns are fully addressed and made moot.”) Moreover, we are unpersuaded that merely appending some data to other data has substantive significance with respect to subject matter eligibility, especially where the data appended is content lacking a functional aspect. *Praxair Distrib., Inc. v. Mallinckrodt Hosp. Prod. IP Ltd.*, 890 F.3d 1024, 1032 (Fed. Cir. 2018) (“Claim limitations directed to the content of information and lacking a requisite functional relationship are not entitled to patentable

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weight because such information is not patent eligible subject matter under 35 U.S.C. § 101.”).

Because the Appellant has not shown error in the Examiner’s rejection, we sustain the rejection of all claims under 35 U.S.C. § 101 as directed to abstract ideas.

#### DECISION

We affirm the rejection of claims 1–6, 14, 16, 18–23, 25, and 29–31 under 35 U.S.C. § 101.

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