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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* SIMON BLYTHE

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Appeal 2017-001792<sup>1</sup>  
Application 11/964,859<sup>2</sup>  
Technology Center 3600

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Before BIBHU R. MOHANTY, NINA L. MEDLOCK, and  
ROBERT J. SILVERMAN, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge*.

DECISION ON APPEAL

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<sup>1</sup> Our decision references Appellant's Appeal Brief ("App. Br.," filed March 28, 2016) and Reply Brief ("Reply Br.," filed November 15, 2016), and the Examiner's Answer ("Ans.," mailed September 19, 2016), Advisory Action ("Adv. Act.," mailed November 30, 2015), and Final Office Action ("Final Act.," mailed September 16, 2015). The record includes a transcript of the March 13, 2019 oral hearing.

<sup>2</sup> Appellant identifies MasterCard International, Inc. as the real party in interest. App. Br. 2.

## STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 12–16, 18–20, and 22. We have jurisdiction under 35 U.S.C. § 6(b). An oral hearing in this appeal was held on March 13, 2019.

We AFFIRM.

## CLAIMED INVENTION

Appellant's claimed invention "generally relates to payment transaction systems, and more particularly to conducting a payment transaction using a pre-allocated resource" (Spec. 1, ll. 6–8).

Claim 12, reproduced below with bracketed notations added, is the sole independent claim and representative of the claimed subject matter:

12. A method for conducting an electronic payment transaction in electronic cashless transaction processing comprising:

[(a)] storing on a payment device a user specified allowable first resource amount that can be charged to a user account and at least one user specified class of good or service associated with said user specified allowable first resource amount, said payment device associated with said user account;

[(b)] transmitting with said payment device a transaction instruction to a payment terminal, said transaction instruction including said user specified allowable first resource amount and said at least one user specified class of good or service;

[(c)] transmitting with said payment terminal an authorization request through a payment network to a credit grantor, said authorization request including a second resource amount to charge said user account, a merchant identifier associated with said second resource amount, said user specified allowable first resource amount, and said at least one user specified class of good or service, said merchant identifier determined by said payment terminal, said merchant identifier

representing merchants providing particular classes of goods and services;

[(d)] comparing with a control module, configured in a server associated with said credit grantor, said user specified allowable first resource amount to said second resource amount;

[(e)] comparing with said control module, configured in a server associated with said credit grantor, said at least one user specified class of good or service to said merchant identifier; and

[(f)] authorizing with said control module, configured in a server associated with said credit grantor, the charging of said user account for said second resource amount for said merchant identifier when said second resource amount is less than said user specified allowable first resource amount and said merchant identifier corresponds to said at least one user specified class of good or service based on the comparison of said merchant identifier and said at least one user specified class of good or service.

#### REJECTION

Claims 12–16, 18–20, and 22 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

#### ANALYSIS

Appellant argues the pending claims as a group (App. Br. 4–7). We select independent claim 12 as representative. The remaining claims stand or fall with claim 12. *See* 37 C.F.R. §41.37(c)(1)(iv).

Under 35 U.S.C. § 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. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice Corp.*, 573 U.S. at 217. The first step in that analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are not directed to a patent-ineligible concept, e.g., an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. at 79, 78).

The Court acknowledged in *Mayo*, that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo*, 566 U.S. at 71. Therefore, the Federal Circuit has instructed that claims are to be considered in their entirety to determine “whether their character as a whole is directed to excluded subject matter.” *McRO, Inc. v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)).

Focusing on step one of the *Mayo/Alice* framework, we are not persuaded, as an initial matter, that the Examiner erred in determining that claim 12 is directed to an abstract idea. The Federal Circuit has explained that “the ‘directed to’ inquiry applies a stage-one filter to claims, considered in light of the [S]pecification, based on whether ‘their character as a whole is

directed to excluded subject matter.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp.*, 790 F.3d at 1346). It asks whether the focus of the claims is on a specific improvement in relevant technology or on a process that itself qualifies as an “abstract idea” for which computers are invoked merely as a tool. *See id.* at 1335–36. Here, the Specification, including the claim language, make clear that the claims focus on an abstract idea, and not on any improvement to computer technology and/or functionality.

The Specification is entitled “PAYMENT TRANSACTION SYSTEM,” and discloses that the present invention relates, in particular, to “conducting a payment transaction using a pre-allocated resource” (Spec. 1, ll. 6–8). The Specification describes, in the “Brief Description of the Related Art” section, that consumers increasingly are using payment devices, e.g., credit cards, rather than cash, to purchase a wide range of goods and services (*id.* at 1, ll. 12–17), and that with the increased availability of payment devices, consumers increasingly are using these devices to cover gaps in their spending (*id.* at 1, ll. 27–29). As a result, “consumers are finding themselves in situations with increased financial burdens from which it can be difficult to recover” (*id.* at 1, ll. 29–31). Also because many of these payment devices are small, they are especially vulnerable to theft and, once stolen, can be used in a fraudulent transaction (*id.* at 2, ll. 1–5).

The claimed invention is ostensibly intended to address these issues by providing a system that allows a user of a payment device to specify a class of good or service and an allowable resource amount that can be charged to a user account for the selected class of good or service (*id.* at 2,

ll. 10–16). A charge to the user account is then authorized based on the selected class of good or service and the allowable resource amount (*id.* at 2, ll. 16–19).

Understood in light of the Specification, claim 12 is, thus, directed to a method for conducting an electronic payment transaction comprising:

- (1) storing user-specified transaction parameters, i.e., “storing . . . a user specified allowable first resource amount that can be charged to a user account and at least one user specified class of good or service associated with said user specified allowable first resource amount” (step (a));
- (2) transmitting the user-specified parameters to a payment terminal, i.e., “transmitting . . . a transaction instruction to a payment terminal, . . . including said user specified allowable first resource amount and said at least one user specified class of good or service” (step (b));
- (3) transmitting an authorization request, including transaction information and the user-specified parameters, to a credit grantor, i.e., “transmitting . . . an authorization request . . . to a credit grantor, . . . including a second resource amount to charge said user account, a merchant identifier . . . , said user specified allowable first resource amount, and said at least one user specified class of good or service” (step (c));
- (4) comparing the transaction information and the user-specified parameters, i.e., “comparing . . . said user specified allowable first resource amount to said second resource amount” and “comparing . . . said at least one user specified class of good or service to said merchant identifier” (steps (d) and (e)); and
- (5) authorizing the charging of a user account based on the comparison, i.e., “authorizing . . . the charging of said user account for said second resource amount . . . when said second resource amount is less than said user specified allowable first

resource amount and said merchant identifier corresponds to said at least one user specified class of good or service” (step (f)). In other words, claim 12 is directed to authorizing a payment transaction by collecting and analyzing (i.e., comparing) information, and reporting the results of the collection and analysis, i.e., to a commercial interaction, which is a method of organizing human activity and, therefore, an abstract idea. *See* 2019 REVISED PATENT SUBJECT MATTER ELIGIBILITY GUIDANCE, 84 Fed. Reg. 50, 52 (Jan. 7, 2019) (“Revised Guidance”).

The Federal Circuit has held consistently that abstract ideas include the concepts of collecting data, analyzing the data, and displaying the results of the collection and analysis, including when limited to particular content. *See, e.g., Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017) (identifying the abstract idea of collecting, displaying, and manipulating data); *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (characterizing collecting information, analyzing information by steps people go through in their minds, or by mathematical algorithms, and presenting the results of collecting and analyzing information, without more, as matters within the realm of abstract ideas); *see also SAP America, Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018) (“As many cases make clear, even if a process of collecting and analyzing information is ‘limited to particular content’ or a particular ‘source,’ that limitation does not make the collection and analysis other than abstract.” (quoting *Elec. Power Grp.*, 830 F.3d at 1353, 1355 (citing cases))). Authorizing a payment transaction, based on a comparison of a second resource amount to an allowable first resource amount and a comparison of a merchant identifier to a user specified class of

good or service, also is substantially similar to other concepts that the courts have held abstract. *See, e.g., Berkheimer v. HP, Inc.*, 881 F.3d 1360, 1366 (Fed. Cir. 2018) (concluding that parsing, comparing, storing, and editing data are abstract ideas); *SmartGene, Inc. v. Advanced Biological Labs.*, 555 F. App'x 950 (Fed. Cir. 2014) (comparing new and stored information and using rules to identify options is an abstract idea).

We find no indication in the Specification, nor does Appellant direct us to any indication, that the operations recited in claim 12 invoke any assertedly inventive programming, require any specialized computer hardware or other inventive computer components, i.e., a particular machine, or that the claimed invention is implemented using other than generic computer components to perform generic computer functions. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (“[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.”).

We also find no indication in the Specification that the claimed invention effects a transformation or reduction of a particular article to a different state or thing. Nor do we find anything of record, short of attorney argument, that attributes any improvement in computer technology and/or functionality to the claimed invention or that otherwise indicates that the claimed invention integrates the abstract idea into a “practical application,” as that phrase is used in the Revised Guidance.<sup>3</sup>

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<sup>3</sup> We note that Appellant’s briefs were filed, and the Examiner’s Answer mailed, before the USPTO issued the Revised Guidance, which, by its terms, applies to all applications, and to all patents resulting from applications, filed before, on, or after January 7, 2019. In accordance with the Revised Guidance, a claim is generally considered “directed to” an abstract idea if

Appellant argues that “[t]he ability to store user specified parameters on a payment device, with those parameters being merged with other details in an authorization request” provides for improved computing because “without the full process of claim 12,” the authorization request would be required to be routed through a user-account-based database to determine if there are any related user-specified parameters (App. Br. 6). Appellant, thus, maintains the claimed invention provides improved computing because it avoids additional routing to identify user-specified characteristics (*id.* at 6-7). Yet, we find nothing in the Specification that attributes an improvement in computer functionality to the claimed invention. And, as the Examiner observes, Appellant does not explain how “less routing” is improving computing (Ans. 4).

Responding to the Examiner’s Answer, and citing the USPTO’s then newly issued November 2, 2016 Memorandum to the Patent Examining

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(1) the claim recites subject matter falling within one of the following groupings of abstract ideas: (a) mathematical concepts; (b) certain methods of organizing human activity, e.g., fundamental economic principles or practices, commercial or legal interactions; and (c) mental processes, and (2) the claim does not integrate the abstract idea into a practical application, i.e., apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception. *See* Revised Guidance, 84 Fed. Reg. at 54–55. The Revised Guidance references the MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) §§ 2106.05(a)–(c) and (e)–(h) in describing the considerations that are indicative that an additional element or combination of elements integrates the judicial exception, e.g., the abstract idea, into a practical application. *Id.* at 55. If the recited judicial exception is integrated into a practical application, as determined under one or more of these MPEP sections, the claim is not “directed to” the judicial exception.

Corps,<sup>4</sup> Appellant notes that, according to the Memorandum, an indication that a claim is directed to an improvement in computer-related technology may include: (1) a teaching in the Specification about how the claimed invention improves a computer or other technology; or (2) a particular solution to a problem or a particular way to achieve a desired outcome defined by the claimed invention, as opposed to merely claiming the idea of a solution or outcome (Reply Br. 2). Pointing to the disclosure in the Specification at page 2, lines 11–19 and page 11, lines 17–25, Appellant, thus, ostensibly maintains that the Specification there teaches how the claimed invention is “a significant improvement both in computing and in the technology of electronic payment processing” (*id.* at 3).

The Specification describes, at page 2, lines 11–19, that the disclosed system includes an allocation module that allows a user of a payment device to specify a class of good or service and an allowable resource amount that can be charged to a user account for the selected class of good or service, and a control module that authorizes a charge to the user account based on the selected class of good or service and the allowable resource amount. And the Specification further discloses, at page 11, lines 17–25, the several advantages that may stem from providing the payment device of the present invention on which the user-specified information is stored, i.e., allowing consumers to gain better control of their expenditures and minimizing the likelihood of fraud based on illicit use of the payment device. Appellant

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<sup>4</sup> The memorandum, entitled, “Recent Subject Matter Eligibility Decisions” (available at <https://www.uspto.gov/sites/default/files/documents/McRo-Bascom-Memo.pdf>), provides a discussion of the Federal Circuit’s decisions in *McRO* and *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016).

asserts that the claimed invention provides “improvement both for client control and anti-fraud,” and that “[t]his is a significant improvement both in computing and in the technology of electronic payment processing.” But, even accepting Appellant’s argument, there is a fundamental difference between computer functionality improvements, on the one hand, and uses of existing computers as tools to perform a particular task, on the other. Indeed, the Federal Circuit applied this distinction in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d. 1327 (Fed. Cir. 2016) in rejecting a § 101 challenge at the step one stage in the *Alice* analysis because the claims at issue focused on a specific type of data structure, i.e., a self-referential table for a computer database, designed to improve the way a computer carries out its basic functions of storing and retrieving data, and not on asserted advances in uses to which existing computer capabilities could be put. *Id.* at 1335–36.

We find no parallel here between claim 12 and the claims in *Enfish* nor any comparable aspect in claim 12 that represents an improvement to computer functionality. The alleged advantages that Appellant touts do not concern an improvement to computer capabilities but instead relate to an alleged improvement in processing electronic payments — a process in which a computer is used as a tool in its ordinary capacity.

Further, to the extent Appellant maintains that the claimed invention is patent-eligible because claim 12 is not preemptive of all methods of electronic payment processing (Reply Br. 4), we note that preemption is not the sole test for patent-eligibility. Although the Supreme Court has described “the concern that drives [the exclusion of abstract ideas from patent eligible subject matter] as one of pre-emption,” *Alice Corp.*, 573 U.S.

at 216, characterizing preemption as a driving concern for patent eligibility is not the same as characterizing preemption as the sole test for patent eligibility. “The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability” and “[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice Corp.*, 134 S. Ct. at 2354).

“[P]reemption may signal patent ineligible subject matter, [but] the absence of complete preemption does not demonstrate patent eligibility.” *Id.*

Turning to step two of the *Mayo/Alice* framework, Appellant notes that the Examiner has taken the position that the claimed invention falls within methods of organizing human activity and “provides nothing significantly more, such as: improvements to another technology or technical field; improvements to the functioning of the computer itself; or, meaningful limitations beyond generally linking the use of the abstract idea to a particular technological environment” (App. Br. 5 (citing Final Act. 4)). Appellant asserts, “[c]ontrary to the Examiner’s assertions, there is in fact improvement to the computing itself” (*id.*). But, as described above, we are not persuaded that the claimed invention involves any improvement in computer functionality.

Appellant also challenges the Examiner’s determination that the elements of the claimed method “execute in a manner routinely and conventionally expected of these elements” (*id.*). In this regard, Appellant notes that claim 12 recites “**storing on a payment device** a user specified allowable first resource amount . . . and at least one user specified class of

good or service associated with said user specified allowable first resource amount” (*id.*).

Appellant argues that storing particular parameters on a payment device is “not conventional or routine” (*id.* at 6). Yet, Appellant cannot reasonably deny that storing data on a payment device, which Appellant concedes, and the Specification explicitly discloses, “can be any type of personal computer device, including but not limited to a personal computer, such as a lap top computer, handheld computer, mobile phone, personal digital assistant (PDA), and/or any other device comprising electronic and/or magnetic components, such as a smart card and magnetic stripe card” (*see* Spec. 6), is one of the most basic functions of such a device.<sup>5</sup> *See 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.”); *see also Berkheimer v. HP, Inc.*, 890 F.3d 1369, 1373 (Fed. Cir. 2018) (Moore, J., concurring) (“[I]n accordance with *Alice*, [the Federal Circuit has] repeatedly recognized the absence of a genuine dispute as to eligibility for

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<sup>5</sup> The USPTO’s April 19, 2018 Memorandum to the Examining Corps entitled, “Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*),” available at <https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.pdf>, expressly directs that an examiner may support the position that an additional element (or combination of elements) is well-understood, routine or conventional with “[a] citation to an express statement in the specification . . . that demonstrates the well-understood, routine, conventional nature of the additional element(s)” (*id.* at 3).

the many claims that have been defended as involving an inventive concept based merely on the idea of using existing computers or the Internet to carry out conventional processes, with no alteration of computer functionality.”).

The same also is true of the claimed step of “transmitting with said payment terminal an authorization request through a payment network to a credit grantor . . . including a second resource amount to charge said user account, a merchant identifier associated with said second resource amount, said user specified allowable first resource amount, and said at least one user specified class of good or service.” Appellant argues, as best understood, that the payment terminal is required to merge, into the authorization request, details related to the financial transaction (i.e., a second resource amount to charge said user account, a merchant identifier associated with said second resource amount) and details transmitted to the payment terminal from the payment device (i.e., the user specified allowable first resource amount and the at least one user specified class of good or service), and that there is no showing as to the routine and conventional nature of this processing (App. Br. 6). But, again, Appellant cannot reasonably deny that combining various data by a payment terminal, which the Specification explicitly discloses as “a computer device” (Spec. 6), is not a basic function of such a device.

For much the same reasons, we also are not persuaded of Examiner error by Appellant’s argument that there is no showing that the “transmission of user-specified details, which are stored on the associated payment device to the payment terminal is of routine or conventional nature” (App. Br. 6). The Specification discloses, with reference to Figures 1 and 4, that payment device 12 initiates a network connection 70 to the payment

terminal 14 (Spec. 11). In one embodiment, where the payment device is a cellular phone, the Specification discloses that a telephone company (TELCO) provider can be used as a gateway into one or more payment networks, and in another embodiment, where the payment device is a smart card, the Specification states that the payment device initiates the network connection by polling for a wireless network connection “as is known in the art” (*id.* at 11–12). In other words, it appears clear from the Specification that the data stored on the payment device are transmitted to the payment terminal using generic network components operating in their normal, routine, and expected manner.

We are not persuaded, on the present record, that the Examiner erred in rejecting claim 12 under 35 U.S.C. § 101. Therefore, we sustain the Examiner’s rejection of claim 12, and claims 13–16, 18–20, and 22, which fall with claim 12.

#### DECISION

The Examiner’s rejection of claims 12–16, 18–20, and 22 under 35 U.S.C. § 101 is affirmed.

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