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EXAMINER
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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* CHANDRA BALASUBRAMANIAN, FRANCIS M. SHERWIN,  
MICHAEL A. KERESMAN III, and ADAM RATICA

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Appeal 2017-005380  
Application 14/026,232<sup>1</sup>  
Technology Center 3600

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Before, JOSEPH A. FISCHETTI, ANTON W. FETTING, and MATTHEW  
S. MEYERS, *Administrative Patent Judges*.

FISCHETTI, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's  
final rejection of claims 1-20. We have jurisdiction under 35 U.S.C. § 6(b).

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<sup>1</sup> Appellants identify CardinalCommerce Corporation as the real party in  
interest. Br. 1.

## SUMMARY OF DECISION

We AFFIRM.

### THE INVENTION

Appellants' claims cover "facilitating the authentication of an individual to conduct a secure transaction with a credit or debit card or other payment instrument or payment means over a communications network." Spec. ¶2.

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

1. A system that supports authentication of an account holder in connection with a transaction conducted between a first party and a second party, wherein the first party accepts payment via a plurality of different payment options selectable by the second party, said plurality of different payment options being associated with a plurality of different authentication methods prescribed therefor, said system comprising:

a receiving part that receives payment information over the Internet at a server operatively connected to the Internet, said payment information identifying a particular payment option used by the second party for the transaction, and said server being equipped to format and route messages over the Internet in different manners to accommodate the plurality of different authentication methods;

a determining part that determines from the payment information received at the server which of the different authentication methods is prescribed for the type of payment option identified in the payment information;

a selecting part that selects, in accordance with the determination made by the determining part, a particular

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authentication method from the plurality of different authentication methods supported by the server; and,

an obtaining part that obtains an authentication determination for the transaction in accordance with the selected authentication method, said obtaining part being arranged to format messages and route the formatted messages over the Internet in accordance with one or more mandates of the selected authentication method.

#### THE REJECTION

The following rejection is before us for review.

Claims 1–20 are rejected under 35 U.S.C. § 101.

#### ANALYSIS

We will sustain the rejection of claims 1–20 under 35 U.S.C. § 101.

The Supreme Court

set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. First,[] determine whether the claims at issue are directed to one of those patent-ineligible concepts. [] If so, we then ask, “[w]hat else is there in the claims before us?” [] To answer that question,[] consider the elements of each claim both individually and “as an ordered combination” to determine whether the additional elements “transform the nature of the claim” into a patent-eligible application. [The Court] described step two of this analysis as a search for an “inventive concept”—*i.e.*, an element or combination of elements that is “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.”

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*Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2355 (2014) (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)).

To perform this test, we must first determine whether the claims at issue are directed to a patent-ineligible concept.

Although the Court in *Alice* made a direct finding as to what the claims were directed to, we determine that this case's claims themselves and the Specification provide enough information to inform one as to what they are directed to.

The representative claim 1 results in:

*Obtain[ing] an authentication determination for the transaction in accordance with the selected authentication method, ...formatting messages and rout[ing] the formatted messages over the Internet in accordance with one or more mandates of the selected authentication method.*

The Examiner found that the claims are directed to “the abstract idea of authentication of an account holder.” Final Act. 2.

The Specification states:

While widely used for more traditional face-to-face transactions, use of standard cards in connection with e-commerce presents certain difficulties, including difficulties concerning authentication or positive identification of the cardholder. For example, maintaining consumer confidence in security has become difficult with increased reports of fraud. The resulting apprehension is also fueled by consumer uncertainty of the reputation or integrity of a merchant with

whom the consumer is dealing. Questionable security of the consumer's card information or other personal information typically submitted along with a traditional e-commerce transaction (e.g., address, card number, phone number, etc.) serves to increase apprehension even more. Additionally, cardholders, merchants and financial institutions are all concerned about safeguarding against fraudulent or otherwise unauthorized transactions. Similarly, other payments methods are concerned with security.

Specification ¶ 4.

The Specification states:

a plurality of individual authentication initiative plug-in components **232** that listen to the message distribution layer **220** for a specific message type. The respective plug-in component **232** is activated by the message distribution layer **220** that sends messages to the specified plug-in component **232** based upon the type of payment instrument or method being used for the transaction being processed. For example, as shown, the MAPS **200** optionally includes plug-in components **232** for Visa®, MasterCard® and other payment instruments or methods.

Spec. ¶ 37.

The Specification describes:

Suitably, via the thin-client approach (or alternately the direct or easy connection approaches) the MAPS **200** obtains payment information for the transaction from the merchant's server **100**. Suitably, the payment information includes a number or name identifying the particular payment instrument or account being used (i.e., the card number or account number or account name), an expiration date, transaction details (i.e., the transaction amount, etc.), and other pertinent payment data. In the case of the thin-client approach, the payment information

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is obtained from the merchant's website or page via the request layer **110** in the form of name/value pairs.

Spec.¶ 42.

Thus, all this evidence shows that claim 1 is directed to a merchant authentication payment process with different authentication methods prescribed for each of different payment options. It follows from prior Supreme Court cases, and *Gottschalk v. Benson*, 409 U.S. 63 (1972), in particular, that the claims at issue here are directed to an abstract idea. A merchant authentication payment process with different authentication methods prescribed for each of different payment options is a fundamental economic practice because it safeguards against fraud. *See* Specification ¶ 4. The patent-ineligible end of the spectrum includes fundamental economic practices. *See Alice*, 134 S. Ct. at 2355–2357; *see also Bilski*, 561 U.S. at 611.

As in *Alice*, we need not labor to delimit the precise contours of the “abstract ideas” category in this case. *Id.* It is enough to recognize that there is no meaningful distinction in the level of abstraction between the concept of an intermediated settlement in *Alice* and the concept of a merchant authentication payment process with different authentication methods prescribed for each of different payment options, at issue here. Both are squarely within the realm of “abstract ideas” as the Court has used that term. *Id.* That the claims do not preempt all forms of the abstraction or may be limited to credit card purchases or ATM transactions, does not make

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them any less abstract. *See OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1360–61 (Fed. Cir. 2015).

Claim 1, unlike the claims found non-abstract in prior cases, uses generic computer technology to perform data reception, transmission, and linkage and does not recite an improvement to a particular computer technology. *See, e.g., McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299, 1314–15 (Fed. Cir. 2016) (Finding claims not abstract because they “focused on a specific asserted improvement in computer animation.”).

The introduction of a computer into the claims does not alter the analysis at *Mayo* step two.

[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention. Stating an abstract idea “while adding the words ‘apply it’” is not enough for patent eligibility. Nor is limiting the use of an abstract idea “ ‘to a particular technological environment.’ ” Stating an abstract idea while adding the words “apply it with a computer” simply combines those two steps, with the same deficient result. Thus, if a patent’s recitation of a computer amounts to a mere instruction to “implemen[t]” an abstract idea “on . . . a computer,” that addition cannot impart patent eligibility. This conclusion accords with the preemption concern that undergirds our § 101 jurisprudence. Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of “additional featur[e]” that provides any “practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.”

*Alice*, 134 S. Ct. at 2358 (citations omitted).

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“[T]he relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea . . . on a generic computer.” *Alice* 134 S. Ct. at 2359. They do not.

Taking the claim elements separately, the function performed by the computer at each step of the process is purely conventional. Using a computer to retrieve, select, and apply decision criteria to data, and thus, modifying the data as a result, amounts to electronic data query and retrieval—one of the most basic functions of a computer. All of these computer functions are well-understood, routine, conventional activities previously known to the industry. *See Electric Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1354 (Fed. Cir. 2016); *see also In re Katz Interactive Call Processing Patent Litigation*, 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.”). In short, each step does no more than require a generic computer to perform generic computer functions. As to the data operated upon, “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.” *SAP America, Inc. v. Investpic, LLC*, 890 F.3d 1016, 1022 (Fed. Cir. 2018) (citation omitted).

Considered as an ordered combination, the computer components of Appellants’ method add nothing that is not already present when the steps

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are considered separately. The sequence of data reception-analysis-access/display is equally generic and conventional or otherwise held to be abstract. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (Sequence of receiving, selecting, offering for exchange, display, allowing access, and receiving payment recited an abstraction.); *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*, 876 F.3d 1372, 1378 (Fed. Cir. 2017) (Sequence of data retrieval, analysis, modification, generation, display, and transmission.); *Two-Way Media Ltd. v. Comcast Cable Communications, LLC*, 874 F.3d 1329, 1339 (Fed. Cir. 2017) (Sequence of processing, routing, controlling, and monitoring.). The ordering of the steps is, therefore, ordinary and conventional.

The method claims do not, for example, purport to improve the functioning of the computer itself. Nor do they effect an improvement in any other technology or technical field. The Specification spells out different generic equipment and parameters that might be applied using this concept and the particular steps such conventional processing would entail based on the concept of information access under different scenarios. *See, e.g.*, Spec. ¶¶ 19–22. The Specification does not describe any particular improvement in the manner a computer functions, at least with respect to the claims in the instant application. Instead, the claims at issue amount to nothing significantly more than instructions to apply the abstract idea of information access using some unspecified, generic computer. Under our

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precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2360.

The system claims

are no different from the method claims in substance. The method claims recite the abstract idea implemented on a generic computer; the system claims recite a handful of generic computer components configured to implement the same idea. This Court has long “warn[ed] . . . against” interpreting § 101 “in ways that make patent eligibility ‘depend simply on the draftsman’s art.’”

*Id.*

We have reviewed all the arguments (Appeal Br. 8–19) Appellants have submitted concerning the patent eligibility of the claims before us that stand rejected under 35 U.S.C. § 101. We find that our analysis above substantially covers the substance of all the arguments, which have been made. But, for purposes of completeness, we will address various arguments in order to make individual rebuttals of same.

Appellants argue, “[t]he Examiner provides no support in making the allegation and thus fails to establish a *prima facie* case that the claims are for an abstract idea.” Appeal Br. 9.

We disagree with Appellants. In rejecting the pending claims under §101, the Examiner analyzed the claims using the *Mayo/Alice* two-step framework, consistent with the guidance set forth in the USPTO’s 2014 INTERIM GUIDANCE ON PATENT SUBJECT MATTER ELIGIBILITY. *See* Final Act. 2–5. Specifically, the Examiner notified Appellants that the claims are

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broadly directed to “the abstract idea of authentication of an account holder.” *Id.* at 2. The Examiner further found,

The additional element(s) or combination of elements in the claim(s) other than the abstract idea per se amount(s) to no more than: server. Viewed as a whole, these additional claim element(s) do not provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself.

*Id.* at 2–3.

In this regard, there is no requirement that examiners must provide evidentiary support in every case before a conclusion can be made that a claim is directed to an abstract idea. *See, e.g.*, para. IV, “JULY 2015 UPDATE: SUBJECT MATTER ELIGIBILITY” to 2014 INTERIM GUIDANCE ON PATENT SUBJECT MATTER ELIGIBILITY (2014 IEG), 79 Fed. Reg. 74618 (Dec. 16, 2014):

The courts consider the determination of whether a claim is eligible (which involves identifying whether an exception such as an abstract idea is being claimed) to be *a question of law*. Accordingly, courts do not rely on evidence that a claimed concept is a judicial exception, and in most cases resolve the ultimate legal conclusion on eligibility without making any factual findings.

(Emphasis added.) We agree that evidence may be helpful in certain situations where, for instance, facts are in dispute.<sup>2</sup> But, it is not always

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<sup>2</sup> *See, e.g.*, MPEP 2106.07(a)(III) (2018) (“The courts consider the determination of whether a claim is eligible (which involves identifying

necessary. Based on the above analysis set forth by the Examiner, we are unpersuaded it is necessary in this case.

All that is required of the Office to meet its *prima facie* burden of production is that the Examiner set forth the statutory basis of the rejection and the reference or references relied upon in a sufficiently articulate and informative manner as to meet the notice requirement of 35 U.S.C. § 132. As the statute itself instructs, the Examiner must “notify the applicant,” “stating the reasons for such rejection,” “together with such information and references as may be useful in judging the propriety of continuing prosecution of his application.” 35 U.S.C. § 132; *see In re Jung*, 637 F.3d 1356, 1363 (Fed. Cir. 2011). Here, as we found above, the Examiner has made these findings as required by the statute. *See* Final Act. 2--5.

Appellants argue,

the claims are directed to methods of authentication and/or identity verification carried out in accordance with a plurality of different authentication protocols, e.g., by determining and selecting an appropriate authentication protocol (from a plurality of different authentication protocols) to be used in connection with a given payment type or option and obtaining an authentication determination in accordance with the selected protocol.

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whether an exception such as an abstract idea is being claimed) to be a question of law. Thus, the court does not require ‘evidence’ that a claimed concept is a judicial exception, and generally decides the legal conclusion of eligibility without resolving any factual issues.” (Citations omitted.)

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(Appeal Br. 8).

In light of the breadth of the claim, the Appellants' argument is not persuasive as to error in the rejection because none of the claims require "protocols" let alone "authentication protocols". Assuming arguendo that the claims did so recite this limitation, such recitation still would not raise the claims to a level of patent eligibility because a protocol is an abstraction in of and itself because a protocol requires conventions<sup>3</sup> which are abstract. "[A] claim for a *new* abstract idea is still an abstract idea." *Synopsis, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (citing *Mayo*, 566 U.S. at 90).

Appellants cite to various limitations in claim 1 which they believe "result in improved technical functioning", because allegedly, they "result in the ability to support multiple different authentication protocols employed in connection with multiple different payment options." (Appeal Br. 9–10).

We disagree with Appellants. First and again, the claims do not recite the term "protocol" so Appellants' arguments are not based on limitations appearing in the claims and are not commensurate with the broader scope of claim 1 which merely recites different authentication methods. *In re Self*, 671 F.2d 1344, 1348 (CCPA 1982). Second, the claims merely recite the "internet", "server" and "parts" thereof only in a generic sense. Appellants' arguments that the system "guard[s] against unwanted fraud and/or

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<sup>3</sup> Protocol: a set of conventions governing the treatment and especially the formatting of data in an electronic communications system. (<https://www.merriam-webster.com/dictionary/protocol>) (last visited 8/13/2018).

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chargebacks” is directed to an effect, and not an advancement in technology, which does not advance the claims toward patent eligibility. We look to whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.

*See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

Appellants argue, “the Examiner has NOT found that the claims are rejectable under §102 and §103 of the patent statute, which govern novelty and unobviousness. In other words, it appears that the Office Action acknowledges that the claims as a whole recite novel and unobvious (and therefore otherwise patentable) subject matter.” (Appeal Br. 12).

We are not persuaded by Appellants’ argument because the standard for patentability under 35 U.S.C. § 103(a) is obviousness, the standard for patentability under 35 U.S.C. § 102 is novelty, and the standard for patent eligibility under 35 U.S.C. § 101 is abstract idea. Each of these standards is separately required to be met before patentability can be conferred on invention, which is not the case here based on the latter standard. The question in step two of the *Alice* framework is not whether an additional feature is novel, but whether the implementation of the abstract idea involves “more than performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343, 1347–1348 (quoting *Alice*, 134 S. Ct. at 2359). As found *supra*, we

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find nothing, which takes the claimed implementation outside of this standard.

Appellants argue, “these tasks are NOT generic computer functions. Rather, they are specific operations which in combination with the other claimed features results in novel and non-obvious subject matter and an improvement to technologies in the marketplace.” (Appeal Br. 17–18).

We disagree with Appellants. As found *supra*, we find nothing in the claims that is directed to an improvement in computer capabilities. The capability of the computer as claimed before us here remains that of a generic computer. That the claimed process allegedly results in “obtain[ing] account holder authentication [(App. Br. 15)],” is not the function of a technical improvement in the computer, e.g., higher speed processor due to circuit construction. Rather, it is merely the normal work by computers invoked as the tool for the process.

Appellants argue, “[t]he claims call for a physical change in the processing steps depending upon outcome determinative logic.” (Appeal Br. 16).

We disagree with Appellants that physical change occurs in the context of changing authentication of processing steps. In *Diamond v. Diehr*, 450 U.S. 175 (1981), the Court established eligibility under section 101 for claims containing mathematical formulas when the claim “implements or applies that formula in a structure or process which, when considered as a whole, is performing a function which the patent laws were

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designed to protect (*e.g.*, transforming or reducing an article to a different state or thing).” *Diamond*, 450 U.S. at 176. In contrast, we fail to see how changing authentication of processing steps transforms an article into a different state or thing.

#### CONCLUSIONS OF LAW

We conclude the Examiner did not err in rejecting claims 1-20 under 35 U.S.C. § 101.

#### DECISION

The decision of the Examiner to reject claims 1-20 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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED