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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PABLO FOUREZ

Appeal 2018-003313
Application 12/544,009
Technology Center 3600

Before ANTON W. FETTING, JOSEPH A. FISCHETTI, and MICHAEL W. KIM, *Administrative Patent Judges*.

FETTING, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE[1]

Pablo Fourez (Appellant[2]) seeks review under 35 U.S.C. § 134 of a final rejection of claims 1, 2, 4, 5, 12–16, 18, 19, 21, 22, 24, 25, 32–39 and 41–46, the only claims pending in the application on appeal. We have

[1] Our decision will make reference to the Appellant's Appeal Brief ("Appeal Br.," filed September 1, 2017) and Reply Brief ("Reply Br.," filed February 6, 2018), and the Examiner's Answer ("Ans.," mailed December 7, 2017), and Final Office Action ("Final Act.," mailed April 4, 2017).

[2] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as MasterCard International Incorporated (Appeal Br. 2).

jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b). This is the second time this application has been appealed. In the prior appeal all rejections were over prior art and were affirmed. *See Ex parte Fourez*, Appeal 2013-002892 (PTAB July 31, 2015). The claims have been substantially amended since then, and the prior art applied in this appeal differs from that in the prior appeal.

The Appellant invented a way of controlling payment card transactions based on a mobile device being substantially co-located with the location where a payment card transaction is initiated, and the ability for selective controls to be placed on the payment card by the cardholder or issuing bank. Specification 1:4–8.

An understanding of the invention can be derived from a reading of exemplary claim 21, which is reproduced below.

> 21. A computer-implemented financial transaction method comprising:
>
> (i) receiving, in a managing computer system including a computer processor and a memory device configured to store identification information of mobile devices in association with respective payment card accounts, an electronic request from a point-of-sale (POS) device of a merchant for authorization of a payment card transaction, the authorization request including information identifying a payment card account of the customer and identifying a country of origin of the request for authorization, wherein said managing computer system is an intermediary system configured to communicate data between the POS device of the merchant and a processing device of a card issuer, via a payment card network;
>
> (ii) receiving, in the managing computer system, information communicated by a mobile device regarding a country in which said mobile device is located and identity of the mobile device as determined by the mobile device, wherein the mobile device

has electronics capable of enabling a determination of a country location of the mobile device;

(iii) storing, in the memory device of the managing computer system, said country location until an updated country location is received from the mobile device upon the mobile device entering a new country location;

(iv) setting authorization locks associated with said payment card account of said customer for enabling and disabling card transactions based on country location of said mobile device;

(v) identifying, in the memory device of the managing computer system, at least one mobile device based on said payment card account information included in said authorization request;

(vi) determining, upon receiving said authorization request from said POS device of the merchant, whether an authorization lock is set for transactions in said country identified in said authorization request; and

(vii) one of: (1) enabling the payment card transaction to be processed for authorization when said authorization lock is not set for transactions in said country identified in said authorization request, and (2) taking action to permit denying the authorization request for the transaction when said authorization lock is set for transactions in said country identified in said authorization request,

wherein (a) after the receiving of the authorization request by the managing system, via the financial network, from the POS device of the merchant, and (b) when taking action, by the managing computer system to permit denying the transaction, transmitting, by the managing system, an electronic alert to both (1) a computing device of the customer alerting the customer to indicate whether the transaction is to be authorized or denied and (2) the processing device of said card issuer indicating that the transaction should be denied.

The Examiner relies upon the following prior art:

Name	Reference	Date
Stevens	US 7,487,170 B2	Feb. 3, 2009
Rados	US 7,600,676 B1	Oct. 13, 2009

Claims 1, 2, 4, 5, 12–16, 18, 19, 21, 22, 24, 25, 32–39 and 41–46[3] stand rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

Claims 1, 2, 4, 5, 12–16, 18, 19, 21, 22, 24, 25, 32–39 and 41–46[4] stand rejected under 35 U.S.C. § 103(a) as unpatentable over Stevens and Rados.

ISSUES

The issues of eligible subject matter turn primarily on whether the claims recite more than abstract conceptual advice of results desired.

The issues of obviousness turn primarily on whether it was predictable to use a server to monitor transactions, and, if so, whether it was predictable for the server to inform the processes relying on it of its outcomes.

[3] Page 2 of the final rejection does not list claim 46 as rejected here. The Appellant acknowledges claim 46 is rejected under 35 U.S.C. § 101. App. Br. 2.

[4] Page 5 of the final rejection does not list claim 46 as rejected here. Pages 14–15 of the final rejection provide a substantive analysis of claim 46 under 35 U.S.C. § 103. The Appellant also acknowledges that claim 46 is rejected under 35 U.S.C. § 103. App. Br. 2.

FACTS PERTINENT TO THE ISSUES

The following enumerated Findings of Fact (FF) are believed to be supported by a preponderance of the evidence.

Facts Related to the Prior Art

Stevens

01. Stevens is directed to the use of location based information in communications networks. Stevens 1:25–27.

02. Stevens describes being configured to receive a set of data identifying the location of a Mobile Communications Device ("Device"). A receiver may be coupled with the Device in any suitable manner known in the art. The location based information may comprise GPS coordinates. Stevens 6:44–67.

03. Stevens describes being configured to send data identifying the Device with the location data. The Device and identifier are associated with a user, a financial card number, a credit card number, an account number, or other numbers or accounts. The number of signals may be sent at different times. The communications signal may be transmitted at different intervals. For example, the intervals may be related to a specific query by a Location Comparison Server, when each measurement takes place, or at the end of each call or other two-way communication session. Stevens 7:19–37.

04. Stevens describes an action request comprising a request to allow access to resources of the server. A rule may comprise granting, denying, or requiring additional information for the

request for access. A rule may be associated with specific geographic regions, wherein the specific rule to be applied (i.e., granting, denying, or requiring additional information for the request for access) is based on the geographic region within which the Device associated with the identifier is located. Stevens 10:3–14.

05. Stevens describes action requests being addressed by comparing the location of the Device with the location which originates an action request. Stevens 10:40–42.

06. Stevens describes the Location Comparison Server determining whether the action request requires location verification. If location comparison is required, the Location Comparison Server queries a Database and correlates an identifier, the Device associated with the identifier, and action request in the Database. Stevens 11:5–13.

Rados

07. Rados is directed to authenticating financial transactions using at least two factors. Rados 1:6–9.

08. Rados describes a Merchant having a Merchant Point-Of-Sale (POS) system. The Merchant may send a message to an Issuer computer through a data network. Rados 5:14–18.

09. Rados describes a phone tower transmitting a text message to a Purchaser phone. The Purchaser may respond to the text message in at least two ways. First, the Purchaser may supply the text message to the Merchant POS terminal. For example, the Purchaser may type a four digit PIN into a keypad at the Merchant

POS terminal. Second, the Purchaser may reply to the text message by sending a new text message. For example, the Purchaser may send the text message "yes" to an Issuer computer. Rados 6:19–28.

10. Rados describes the process branching to steps for denial if the initial analysis is unfavorable. If it is determined that the card information is not valid, or some other portion of the initial analysis is unfavorable, the Issuer denies approval. This denial typically is promptly transmitted to the Merchant, and the Merchant then refuses to complete the transaction with the Purchaser. This denial is typically accompanied with codes explaining the reason for the denial. Rados 7:16–27.

11. Rados describes a third party parent, and the Purchaser may be a student attending the University of State1. The triggering condition may be any transaction over $100, or any transaction located in a state other than State1. The message may contain substantial information about the transaction, such as the amount, the name of the Merchant, and the location of the Merchant. The Third Party, e.g., parent, might not approve a transaction for $450 at "Joe's Hard Liquor Store" located in State2. Alternatively, the Third Party might approve a transaction for $250 at "University Bookstore" located in State1. Thus, these Third Party processes may be used to prevent inappropriate actions by the Purchaser, in addition to preventing criminal actions by a criminal. Rados 11:45–57.

ANALYSIS

Initially we construe the claim 21 limitation of "storing, in the memory device of the managing computer system, said country location until an updated country location is received from the mobile device upon the mobile device entering a new country location". The claim does not recite how this is implemented. The word "upon" might suggest that somehow the data is updated at the time of entering a new country location because of entering the new country location. But the Specification does not support such an interpretation and does not even use the word "upon." This limitation was not in the Application as originally filed, but was made by amendment filed November 10, 2011. We must therefore determine how to otherwise construe this limitation.

The Appellant cites Specification 20:1–24 for support.[5] App. Br. 5. The pertinent part from this cited portion is "receiving in the managing computer system 110 information communicated by the mobile device 160 regarding a current geographic location of the mobile device 160 as determined by the mobile device 160, wherein the mobile device 160 has electronics capable of determining a geographic location of the mobile device 160." Spec. 20:18–23. Although this portion fails to describe how such a determination is made, the Specification goes on to state that

> the mobile device 160 may be set up to periodically report its location to the managing computer system 110. This means that the location information might be received before the managing computer system 110 receives the authorization request, or at the same time or after the managing computer

[5] Specification page 20 has only 23 lines.

> system 110 receives the authorization request, while the authorization request is being processed. As an iteration of the last-mentioned possibility, an alternative or additional feature can be that receipt of an authorization can prompt the managing computer system 110 to inquire of the linked mobile device 160 of its location. The system can be set up to require this location be provided, or not, or other criteria applied to determine when the updated location information is required before the process can proceed (e.g., if the location has not been updated for an extended period, or the pattern of location changes suggests that the mobile device is likely not present at the transaction origination site, such as a transaction occurring at a great distance from the last reported mobile device location. Generally, the last reported location mobile device would be used in many instances.

Spec. 20:23–21:16. Thus, the Specification describes implementing the determination by periodic transmissions, receipt of an authorization request, length of time since last update, and location change pattern analysis. In particular, conventional periodic updates is among the described manners of implementation. Such an implementation is within the scope of the claim, as the claim does not preclude additional transmissions of country location data. None of the described manners of implementation suggest any mechanism for determining that a new country location is entered at the time it is entered. The Specification nowhere otherwise suggests this occurs. Thus, the use of the word "upon" in the limitation means simply at the timing of the next transmission of country location, and does not mean immediately sensing that a country location border has just been crossed.

Claims 1, 2, 4, 5, 12–16, 18, 19, 21, 22, 24, 25, 32–39 and 41–45 rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more

STEP 1[6]

Claim 21, as a method claim, nominally recites one of the enumerated categories of eligible subject matter in 35 U.S.C. § 101. The issue before us is whether it is directed to a judicial exception without significantly more.

STEP 2

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."

Alice Corp. v. CLS Bank Int'l, 573 U.S. 208, 217–18 (2014) (citations omitted) (*citing Mayo Collaborative Servs. v. Prometheus Labs, Inc.*, 566 U.S. 66 (2012)). To perform this test, we must first determine what the claims are directed to. This begins by determining whether the claims recite

[6] For continuity of analysis, we adopt the steps nomenclature from 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Revised Guidance").

one of the judicial exceptions (a law of nature, a natural phenomenon, or an abstract idea). Then, if the claims recite a judicial exception, determining whether the claims at issue are directed to the recited judicial exception, or whether the recited judicial exception is integrated into a practical application of that exception, i.e., that the claims "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." Revised Guidance, 84 Fed. Reg. at 54. If the claims are directed to a judicial exception, then finally determining whether the claims provide an inventive concept because the additional elements recited in the claims provide significantly more than the recited judicial exception.

STEP 2A Prong 1

At a high level, and for our preliminary analysis, we note that method claim 21 recites receiving request, country, and device identification data, storing data, setting authorization locks data, identifying a device based on data, determining whether authorization lock data is set, enabling a transaction or permitting denial of authorization, and alerting transaction parties. Setting data is updating data. Identifying data is rudimentary data analysis. Determining the status of authorization lock data is rudimentary data analysis. Enabling a transaction or permitting denial of authorization are conventional data processing. Alerting parties is transmitting and displaying data. Thus, claim 21 recites receiving, storing, updating, analyzing, processing, transmitting, and displaying data. None of the limitations recite technological implementation details for any of these steps, but instead recite only results desired by any and all possible means.

From this we see that claim 21 does not recite the judicial exceptions of either natural phenomena or laws of nature.

Under Supreme Court precedent, claims directed purely to an abstract idea are patent in-eligible. As set forth in the Revised Guidance, which extracts and synthesizes key concepts identified by the courts, abstract ideas include (1) mathematical concepts[7], (2) certain methods of organizing human activity[8], and (3) mental processes[9]. Among those certain methods of organizing human activity listed in the Revised Guidance are commercial or legal interactions. Like those concepts, claim 21 recites the concept of managing payment processing. Specifically, claim 21 recites operations that would ordinarily take place in advising one to permit or deny payment processing based on location and preset parameters. The advice to permit or deny payment processing based on location and preset parameters involves a financial transaction, which is an economic act, and enabling the payment card transaction, which is an act ordinarily performed in the stream of commerce. For example, claim 21 recites "financial transaction method," which is an activity that would take place whenever one is performing a

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[7] *See, e.g.*, *Gottschalk v. Benson*, 409 U.S. 63, 71–72 (1972); *Bilski v. Kappos*, 561 U.S. 593, 611 (2010); *Mackay Radio & Telegraph Co. v. Radio Corp. of Am.*, 306 U.S. 86, 94 (1939); *SAP America, Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018).

[8] *See, e.g.*, *Bilski*, 561 U.S. at 628; *Alice*, 573 U.S. at 219-20; *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed Cir. 2014); *Smart Sys. Innovations, LLC v. Chicago Transit Auth.*, 873 F.3d 1364, 1383 (Fed. Cir. 2017); *In re Marco Guldenaar Holding B.V.*, 911 F.3d 1157, 1160–61 (Fed. Cir. 2018).

[9] *See, e.g.*, *Benson*, 409 U.S. at 67; *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1371–72 (Fed. Cir. 2011); *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016).

commercial transaction between people. Similarly, claim 1 recites "enabling the payment card transaction," which is also characteristic of commercial payment processing.

The Examiner determines the claims to be directed to steps in a payment transaction. Final Act. 2–3.

The preamble to claim 21 recites that it is a financial transaction method. The steps in claim 21 result in permitting or denying payment processing based on location and preset parameters.

As to the specific limitations, limitations i and ii recite receiving data. Limitations iii – vii recite generic and conventional storing, updating, analyzing, processing, transmitting, and displaying of payment transaction data, which advise one to apply generic functions to get to these results. The limitations thus recite advice for permitting or denying payment processing based on location and preset parameters. To advocate permitting or denying payment processing based on location and preset parameters is conceptual advice for results desired from a commercial or legal interaction.

The Specification at 1:4–8 describes the invention as relating to controlling payment card transactions based on a mobile device being substantially co-located with the location, where a payment card transaction is initiated, and the ability for selective controls to be placed on the payment card by the cardholder or issuing bank. Thus, all this intrinsic evidence shows that claim 21 recites managing payment processing. This is consistent with the Examiner's determination.

This in turn is an example of commercial or legal interactions as a certain method of organizing human activity, because managing payment processing is the way of ensuring commercial interactions are compensated.

The concept of managing payment processing by permitting or denying payment processing based on location and preset parameters is one idea for managing protection against fraudulent activity in an international context. The steps recited in claim 21 are part of how this might conceptually be premised.

Our reviewing court has found claims to be abstract ideas when they recited similar subject matter. *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015) (tracking financial transactions); *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333–34 (Fed. Cir. 2012) (processing financial transactions through a clearing house).

From this, we conclude that at least to this degree, claim 21 recites managing payment processing by permitting or denying payment processing based on location and preset parameters, which is a commercial and legal interaction, one of certain methods of organizing human activity identified in the Revised Guidance, and, thus, an abstract idea.

STEP 2A Prong 2

The next issue is whether claim 21 not only recites, but is more precisely directed to this concept itself, or whether it is instead directed to some technological implementation or application of, or improvement to, this concept, i.e., integrated into a practical application.[10]

> At the same time, we tread carefully in construing this exclusionary principle lest it swallow all of patent law. At some level, "all inventions ... embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." Thus, an invention is not rendered ineligible for patent simply because it involves an abstract concept. "[A]pplication[s]" of

[10] *See, e.g.*, *Alice*, 573 U.S. at 223, discussing *Diamond v. Diehr*, 450 U.S. 175 (1981).

> such concepts " 'to a new and useful end,' " we have said, remain eligible for patent protection. Accordingly, in applying the § 101 exception, we must distinguish between patents that claim the " 'buildin[g] block[s]' " of human ingenuity and those that integrate the building blocks into something more.

Alice, 573 U.S. at 217 (citations omitted).

Taking the claim elements separately, the operation performed by the computer at each step of the process is expressed purely in terms of results, devoid of implementation details. Steps i and ii are pure data gathering steps. Limitations describing the nature of the data do not alter this. Steps iii–iv recite basic conventional data operations, such as generating, updating, and storing data. Steps v–vii recite generic computer processing expressed in terms of results desired by any and all possible means, and so present no more than conceptual advice. The recited use of an intermediary computer to do so is no more than generic use of distributed processing, such as by servers. All purported inventive aspects reside in how the data is interpreted and the results desired, and not in how the process physically enforces such a data interpretation, or in how the processing technologically achieves those results.

Viewed as a whole, the Appellant's claim 21 simply recites the concept of managing payment processing by permitting or denying payment processing based on location and preset parameters as performed by a generic computer. This is no more than conceptual advice on the parameters for this concept and the generic computer processes to process those parameters, and do not recite any particular implementation.

Claim 21 does not, for example, purport to improve the functioning of the computer itself. Nor does it affect an improvement in any other

technology or technical field. The 22 pages of the Specification only spell out different generic equipment[11] and parameters that might be applied using this concept, and the particular steps such general purpose computer processing would entail, based on the concept of managing payment processing by permitting or denying payment processing based on location and preset parameters under different scenarios. They do not describe any particular improvement in the manner a computer functions. Instead, claim 21 at issue amounts to nothing significantly more than an instruction to apply managing payment processing by permitting or denying payment processing based on location and preset parameters using some unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 573 U.S. at 225–26.

None of the limitations reflect an improvement in the functioning of a computer, or an improvement to other technology or technical field, applies or uses a judicial exception to effect a particular treatment or prophylaxis for a disease or medical condition, implements a judicial exception with, or uses a judicial exception in conjunction with, a particular machine or manufacture that is integral to the claim, effects a transformation or reduction of a particular article to a different state or thing, or applies or uses the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that

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[11] The Specification describes a wireless mobile devices such as cellular telephones, wireless e-mail devices such as a Blackberry®, personal digital assistants, laptops with a wireless communication card, or nearly any other form of past or present or future mobile communication device that would be associated with and likely carried by a customer when making or initiating a payment card transaction Spec. 15:4–11.

the claim as a whole is more than a drafting effort designed to monopolize the exception.

We conclude that claim 21 is directed to achieving the result of managing payment processing by advising one to permit or deny payment processing based on location and preset parameters, as distinguished from a technological improvement for achieving or applying that result. This amounts to commercial or legal interactions, which fall within certain methods of organizing human activity that constitute abstract ideas. The claim does not integrate the judicial exception into a practical application.

STEP 2B

The next issue is whether claim 21 provides an inventive concept because the additional elements recited in the claim provide significantly more than the recited judicial exception.

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

> the 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 "implement[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 feature[e]" that provides any "practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself."

Alice, 573 U.S. at 223–24 (citations omitted).

"[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*, 573 U.S. at 225. 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 for receiving, storing, updating, analyzing, processing, transmitting, and displaying data amounts to electronic data query and retrieval—some of the most basic functions of a computer. All of these computer functions are generic, routine, conventional computer activities that are performed only for their conventional uses. *See Elec. Power Grp. LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). *See also 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"). None of these activities is used in some unconventional manner, nor does any produce some unexpected result. The Appellant does not contend it invented any of these activities. In short, each step does no more than require a generic computer to perform generic computer functions. Again, the use of an intermediary computer is conventional distributed processing, such as with a server. 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*, 898 F.3d 1161, 1168 (Fed. Cir. 2018).

Considered as an ordered combination, the computer components of the Appellant's claim 21 add nothing that is not already present when the steps are considered separately. The sequence of data reception-storage-update-analysis-processing-transmission-display is equally generic and conventional. *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.

We conclude that claim 21 does not provide an inventive concept because the additional elements recited in the claim do not provide significantly more than the recited judicial exception.

REMAINING CLAIMS

Claim 21 is representative. The other independent method claim 43 is substantially similar at least as regards to this analysis. The remaining method claims merely describe process parameters. We conclude that the method claims at issue are directed to a patent-ineligible concept itself, and not to the practical application of that concept.

As to the structural claims, they

> 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.'

Alice, 573 U.S. at 226. As a corollary, the claims are not directed to any particular machine.

LEGAL CONCLUSION

From these determinations we further determine that the claims do not recite an improvement to the functioning of the computer itself or to any other technology or technical field, a particular machine, a particular transformation, or other meaningful limitations. From this we conclude the claims are directed to the judicial exception of the abstract idea of certain methods of organizing human activity, as exemplified by the commercial and legal interaction of managing payment processing by advising one to permit or deny payment processing based on location and preset parameters, without significantly more.

APPELLANT'S ARGUMENTS

As to Appellant's Appeal Brief arguments, we adopt the Examiner's determinations and analysis from the Final Act. 2–4, and Ans. 3–19, and reach similar legal conclusions. We now turn to the Reply Brief.

We are not persuaded by the Appellant's argument that the rejection "did not consider these features in combination with the remaining features of the claim." Reply Br. 2. Such consideration is presented *supra*.

We are not persuaded by the Appellant's argument that "incorporation of the managing system at that specific location facilitates the authorization process, assists in the prevention of fraud, and reduces unnecessary communications to the issuer." Reply Br. 3. The steps recited advise one to permit or deny payment processing based on location and preset parameters.

The location of the computer managing this does not affect this analysis. To the extent the Appellant argues that using a third computer to do so improves performance, this is no more than the expected result of any conventional use of distributed processing in its intended fashion, such as by servers.

This is not a case like *BASCOM* (*BASCOM Global Internet v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016)). *See also* Reply Br. 7–8 (related arguments). Initially, we remind Appellant that *BASCOM* did not find claims eligible on the substance, but rather that the Appellees did not provide sufficient evidence to support a 12(b)(6) motion to dismiss in which facts are presumed in the non-movant's favor.

The key fact in *BASCOM* was the presence of a structural change in "installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user. This design gives the filtering tool both the benefits of a filter on a local computer and the benefits of a filter on the ISP server." *BASCOM*, 827 F.3d at 1350. It was not the idea of having user customizable filtering located separately from the user that was inventive, but the manner of accomplishing it in that context, as the relatively primitive internet architecture at that time did not readily lend itself to such filtering. Filtering located separately from the user was already performed. "To overcome some of the disadvantages of installing filtering software on each local computer, another prior art system relocated the filter to a local server." *Id.* at 1344. But it was known that allowing user customization there was desirable. "However, the one-size-fits-all filter on the local server was not ideal." *Id.*

"*BASCOM* explains that the inventive concept rests on taking advantage of the ability of at least some ISPs to identify individual accounts that

communicate with the ISP server, and to associate a request for Internet content with a specific individual account." *Id.* Thus, *BASCOM* solved the problem of how to create the structural relationship known to be desired by finding a way to relate a user to a centrally located filter at a time, when how to do so was unclear. It was not the structural relation *per se*, but how it was accomplished that was inventive. No analogous technological hurdle is described in the instant record. Indeed, the whole point here appears to be to simply use existing distributed processing technology to introduce fraud monitoring by monitoring transactions for activity meeting predefined criteria indicative of potential fraud.

We are not persuaded by the Appellant's argument that the claims "enable the processing of a transaction (e.g., authorization or denial), in a very specific way as recited in the claims, thereby providing a useful result, and improving upon security surrounding transactions." Reply Br. 4. The way is specific only in the sense it is specified using words. Enabling or disallowing processing is conventional decision branch processing in data processing, and even generic programming (conventional IF . . . THEN . . . ELSE programming statements). Such processing necessarily relies on data for decision criteria, so the recited use of such criteria adds no inventive feature.

> We are not persuaded by the Appellant's argument that the
>
> instant claims improve upon such conventional technology, as the mobile phone prompts the managing computer system with its country location (e.g., upon entering/leaving a country), and the managing computer system maintains that country location information until it receives an updated country location from the mobile device when the mobile device enters a new country location. As such, the managing computer system does not require communication (e.g., submission of requests) with

> cellular telephone service providers in order to obtain country location information of mobile phones.

Reply Br. 5 (citations omitted). This is no more than using a database server for its intended purpose, i.e., updating the database when the data alters, and querying the database when the data is needed, using a server for the efficiency of distributed processing. Indeed the whole point of using a database is to have a repository to query, rather than having to recreate the data constantly. Thus, such an arrangement is conventional and rudimentary.

The Appellant also attempts to analogize the claims to those involved in *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016). Reply Br. 6. In *McRO,* the court held that, although the processes were previously performed by humans, "the traditional process and newly claimed method . . . produced . . . results in fundamentally different ways." *FairWarning v. Iatric Systems*, 839 F.3d 1089, 1094 (Fed. Cir. 2016) (differentiating the claims at issue from those in *McRO*). In *McRO,* "it was the incorporation of the claimed rules not the use of the computer, that improved the existing technology process," because the prior process performed by humans "was driven by subjective determinations rather than specific, limited mathematical rules." 837 F.3d at 1314 (internal quotation marks, citation, and alterations omitted). In contrast, the claims of the instant application merely implement an old practice of using decision criteria in making payment processing decisions in a new environment. The Appellant has not argued that the claimed processes of selecting approval or denial apply rules of selection in a manner technologically different from those which humans used, albeit with less efficiency, before the invention was claimed. Merely pigeon holing the

objects of decision making in tiers to aid decision making is both old and itself abstract.

> The claims in *McRO* were not directed to an abstract idea, but instead were directed to "a specific asserted improvement in computer animation, i.e., the automatic use of rules of a particular type." We explained that "the claimed improvement [was] allowing computers to produce 'accurate and realistic lip synchronization and facial expressions in animated characters' that previously could only be produced by human animators." The claimed rules in *McRO* transformed a traditionally subjective process performed by human artists into a mathematically automated process executed on computers.

FairWarning, 839 F.3d at 1094.

The Appellant next contends the claims are analogous to those in *AmDocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288 (Fed. Cir. 2016). The Appellant contends that the claims in *Amdocs* were related to reducing congestion in a network, while still allowing the data to be accessible from a central network. App. Br. 8. This is not quite accurate. The Court's analysis turned heavily on a prior construction.

> Claim 1 requires "computer code for using the accounting information with which the first network accounting record is correlated to enhance the first network accounting record." In Amdocs I, we construed "enhance" as being dependent upon the invention's distributed architecture.
>
> We construed "enhance" as meaning "to apply a number of field enhancements in a distributed fashion." We took care to note how the district court explained that "[i]n this context, 'distributed' means that the network usage records are processed close to their sources before being transmitted to a centralized manager." And we specifically approved of the district court's "reading the 'in a distributed fashion' and the 'close to the source' of network information requirements into the term 'enhance.'"

AmDocs, 841 F.3d at 1300 (citations omitted). Thus, the Court read "to apply a number of field enhancements in a distributed fashion" into "using the accounting information with which the first network accounting record is correlated to enhance the first network accounting record." Appellant admits as much. Reply Br. 8–9. This is substantially more than merely being related to reducing congestion in a network, while still allowing the data to be accessible from a central network. The claims at issue recite no more than using an intermediate computer, and recite no technological implementation details, as were imported into the *Amdocs* claims by the District Court's construction.

> We are not persuaded by the Appellant's argument that
>
> > Appellant's claims operate in a non-conventional and non-generic manner to improve upon the way conventional technology operates by providing a new and useful system and method to greatly increase the accuracy of fraud detection and prevention by imposing blocks and/or generating real-time electronic alerts based on country location information received from a mobile device.

Reply Br. 9–10. We determine and support findings that the claims use conventional operations in conventional manners supra.

We are not persuaded by the Appellant's argument that the claims would not preempt the idea. Reply Br. 10. "Where a patent's claims are deemed only to disclose patent ineligible subject matter under the *Mayo* [*/Alice*] framework, as they are in this case, preemption concerns are fully addressed and made moot." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015).

Claims 1, 2, 4, 5, 12–16, 18, 19, 21, 22, 24, 25, 32–39 and 41–45 rejected under 35 U.S.C. § 103(a) as unpatentable over Stevens and Rados

As to Appellant's Appeal Brief arguments, we adopt the Examiner's determinations and analysis from the Final Office Action, pages 5–24, and Answer, pages 19–24, and reach similar legal conclusions. We now turn to the Reply Brief.

We are not persuaded by the Appellant's argument that

> Rados does not disclose an intermediary system. It discloses only an issuer and a merchant, and neither the merchant nor the card issuer transmits two alerts, as in the present claims, let alone when taking action to permit denying an authorization request when an authorization lock is set. Rather, in Rados, the merchant transmits only a single request (i.e., authorization request) to the issuer. And, the issuer transmits a single message to the customer.

Reply Br. 11. As the Examiner determines,

> this is merely a depiction of distributed computing. The use of an intermediary computer between client and server or between two servers is merely an example of distributed architecture. Almost any two tiered client server architecture can be converted to three-tier architecture by installing intermediary servers to distribute load or separate application logic or for security purposes. For example, it would have been obvious to upgrade the two tier communication between merchant POS and Issuer Computer into a three tier by installing a middle tier broker to handle communication layer. The motivation would have to take advantage of distributed architecture. Examiner further notes that in real life, financial institutions and card networks deploy hundreds of servers and client computers to process a multitude of operations including data processing, messaging, security, load balancing, reconciliation, and so on. Thus, the diagrams in both Appellant's own disclosure as well as in the cited prior art, are merely simplified representations of the actual configuration. The managing computer system in the claims is nothing but a simplified functional representation of a

> client middle tier which would be readily obvious to a person of ordinary skills in the art.

Ans. 23–24. Such servers must logically inform the processes invoking their services of the outcome. Thus, any use of a server must include some signals to both the customer relying on the approval, and the issuer relying on the server's test of the criteria for providing approval. As the Specification and claims do not define or even narrow the implementation of such alerts, and the claims recite that the function of the alerts is to indicate some condition, any signal indicative of such a condition, including that within conventional program flow, would be within the scope of the recited alerts.

> We are not persuaded by the Appellant's argument that
>
> with respect to the Examiner's assertion that [t]here is no reason why an alert cannot be sent to the issuer, Appellant submits that such an alert would be unnecessary as the issuer in Rados determines the authorization or denial of the transaction. Moreover, Appellant respectfully submits that the Examiner's assertion is not a legally adequate basis for rejecting this claim feature.

Reply Br. 12. The Appellant does not respond to the Examiner's determination that it was predictable to use distributed computing to perform the recited steps, which would add the recited alert signal, as we determined *supra*.

> We are not persuaded by the Appellant's arguments that
>
> with respect to the Examiner;s assertion that [t]here is no reason why an alert cannot be sent to the issuer, Appellant submits that the Examiner also responds to Appellant's arguments that, contrary to the present claims, neither message in Rados, (authorization request sent to issuer or the message sent by the issuer to customer) occurs once the issuer has begun to take

> action to deny the transaction (because an authorization lock is set), as in Appellant's claims,

Reply Br. 13, and that

> contrary to the Appealed claims, in Rados, a first message (e.g., the authorization request) is sent from the merchant to the issuer to initiate the transaction, and a second message is transmitted from the issuer to the consumer for additional authorization for the transaction. Regardless of whether a message is sent to the consumer, it is (i) sent from the issuer (not an intermediary computer system between the merchant and the issuer) and (ii) it is not sent once the transaction is already in the process of being declined. Moreover, because the issuer in Rados awaits the consumer's decision as to whether to authorize or deny the transaction in, it would not be until after the messages are transmitted in Rados, and then a response received from the consumer, that the issuer would take action to deny the transaction, which is in stark contrast with Appellant's claim 1.

Reply Br. 14. Again, the intermediary computer is nothing more than the conventional use of distributed computing. As to the timing of the messages occurring "when taking action, by the managing computer system to permit denying the transaction" (claim 1), the Specification and claims do not define or limit the implementation of the initiation of this taking action, and so all processing occurring after the test of the criteria indicates non-approval falls within this scope. As any such signal must occur after such a determination, the timing must follow.

We are not persuaded by Appellant's argument that

> Rados not only fails to disclose or suggest the recited three-party system of the instant claims (i.e., merchant, intermediary computer managing system, card issuer), but the document also fails to disclose or suggest the defined conditional stipulations that must be met prior to transmitting any alert messages.

Reply Br. 14. Again, these would be the corollaries to use of conventional distributed computing.

CONCLUSIONS OF LAW

The rejection of claims 1, 2, 4, 5, 12–16, 18, 19, 21, 22, 24, 25, 32–39 and 41–46 under 35 U.S.C. § 101 as directed to a judicial exception without significantly more is proper.

The rejection of claims 1, 2, 4, 5, 12–16, 18, 19, 21, 22, 24, 25, 32–39 and 41–46 under 35 U.S.C. § 103(a) as unpatentable over Stevens and Rados is proper.

CONCLUSION

The rejection of claims 1, 2, 4, 5, 12–16, 18, 19, 21, 22, 24, 25, 32–39 and 41–46 is affirmed.

In summary:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1, 2, 4, 5, 12–16, 18, 19, 21, 22, 24, 25, 32–39, 41–46	101	Eligibility	1, 2, 4, 5, 12–16, 18, 19, 21, 22, 24, 25, 32–39, 41–46	
1, 2, 4, 5, 12–16, 18, 19, 21, 22, 24, 25, 32–39, 41–46	103	Stevens, Rados	1, 2, 4, 5, 12–16, 18, 19, 21, 22, 24, 25, 32–39, 41–46	
Overall Outcome			1, 2, 4, 5, 12–16, 18, 19, 21, 22, 24, 25, 32–39, 41–46	

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) (2011).

AFFIRMED