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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DAVIDE MESSINA and VINCENT LAPRAS

Appeal 2018–005510
Application 14/451,818
Technology Center 3600

Before ANTON W. FETTING, BIBHU R. MOHANTY, and
CYNTHIA L. MURPHY, *Administrative Patent Judges*.

FETTING, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE¹

Davide Messina and Vincent Lapras (Appellant²) seek review under
35 U.S.C. § 134 of a final rejection of claims 1–22, the only claims pending

¹ Our decision will make reference to the Appellant’s Appeal Brief (“Appeal Br.,” filed December 12, 2017) and Reply Brief (“Reply Br.,” filed May 4, 2018), and the Examiner’s Answer (“Ans.,” mailed March 9, 2018), and Final Action (“Final Act.,” mailed June 27, 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

in the application on appeal. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

The Appellant invented a way of processing of business-to-business payments. Specification para. 1.

An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below (bracketed matter and some paragraphing added).

1. A method for processing business-to-business payments, comprising:

[1] storing,

in a rules database of a processing server,
a plurality of payment rules,

wherein each payment rule includes data related to a payment scheme including at least an institution identifier and a payment amount;

[2] receiving,

by the processing server from a first financial institution associated with a buyer,

a notification of payment to be made by the buyer to a seller,

wherein the notification includes at least a first institution identifier associated with the first financial institution associated with the buyer, a second institution identifier, and a transaction amount,

the second institution identifier being associated with the seller and/or a second financial institution associated with the seller;

[3] forwarding,

by the processing server to the second financial institution,
a payment notification,
wherein the payment notification includes at least the transaction amount and indicates at least one of: the first financial institution associated with the buyer, the buyer, and the seller;
[4] identifying,
in the rules database of the processing server,
a specific payment rule
where the included institution identifier corresponds to the first institution identifier included in the received notification of payment to be made;
and
[5] processing,
by a processing device of the processing server,
a payment to the first financial institution associated with the buyer
based on the payment amount included in the specific payment rule.

The Examiner relies upon the following prior art:

Name	Reference	Date
Fordyce III (Fordyce)	US 2009/0006203 A1	Jan. 1, 2009
Fourez	US 2010/0036770 A1	Feb. 11, 2010

Claims 1–22 stand rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

Claims 1–22 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Fourez and Fordyce.

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 the prior art describes processing funds to a buyer.

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

Fourez

01. Fourez is directed to a payment card that provides multiple flexible payment or funding sources. Fourez para. 3.
02. Fourez describes a managing platform that associates at least two funding sources with the payment card. The funding sources include a preferred funding source and at least one alternate funding source. Next, the preferred funding source is designated as a default funding source and a set of pre-defined routing rules for funding transactions made with the payment card. Then, the managing platform intercepts each transaction of the payment card and routes the transactions to an issuer funding system for the preferred funding source based on the criteria defined in the routing rules using the managing platform. Fourez para. 10.

Fordyce

03. Fordyce is directed to exchanging financial and non-financial transaction data within a payment processing system, such as one for processing credit and debit card transactions. Fordyce para. 2.
04. Fordyce describes a payment processing system that includes a transaction expeditor that processes a plurality of financial transactions, each characterized by a consumer and a merchant engaging in a given financial transaction upon a payment account issued to the consumer by an issuer within the payment processing system. The merchant submits the given financial transaction to an acquirer for processing by the transaction expeditor, which requests the issuer to disburse funds from the consumer for the given financial transaction. The issuer sends the funds to the transaction expeditor which forwards the funds to the acquirer to disburse the funds to the merchant for the given financial transaction. Fordyce para. 8.
05. Fordyce describes how, should a transaction qualify for an incentive program, the qualifier facilitates the implementation of the program by issuing a reward to the consumer. Such reward issuance can involve mailing a reward item (e.g., a bedspread directly to the consumer), sending a message through the fourth payment processing system instructing the merchant for the current transaction to deliver the reward, such as an item of merchandise or a price discount, to the consumer, or send a different message instructing the issuer to deliver the reward. A reward includes, but is not limited to, any discount, credit,

product, service, package, event, experience (such as wine tasting, dining, travel), or any similar item of value. Fordyce para. 68.

ANALYSIS

Claims 1–22 rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more

STEP 1³

Claim 1, 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

³ For continuity of analysis, we adopt the steps nomenclature from 2019 Revised Patent Subject Matter Eligibility Guidance, 84 FR 50 (Jan. 7, 2019) (“Revised Guidance”).

that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.”

Alice Corp., Pty. Ltd. v CLS Bank Intl, 573 U.S. 208, 217–18 (2014) (citations omitted) (citing *Mayo Collaborative Services v. Prometheus Laboratories, 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 one of the judicial exceptions (a law of nature, a natural phenomenon, or an abstract idea). Then, if 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 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 1 recites storing data representing rules, receiving data representing a notification, forwarding data representing a notification, processing a payment, and identifying data representing a rule. Forwarding data is data transmission. Processing a payment is conventional data analysis processing. Identifying data is rudimentary analysis. Thus, claim 1 recites storing, receiving, transmitting, and analyzing 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 1 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 concepts⁴, (2) certain methods of organizing human activity⁵, and (3) mental processes⁶. Among those certain methods of organizing human activity listed in the Revised Guidance are commercial or legal interactions. Like those concepts, claim 1 recites the concept of payment processing. Specifically, claim 1 recites operations that would ordinarily take place in advising one to process an electronic payment based on an amount transmitted and an amount retrieved from some rule data. The advice to process an electronic payment based on an amount transmitted and an amount retrieved from some rule data involves payment processing, which is an economic act, and forwarding a payment notification, which is

⁴ 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 Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018).

⁵ 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).

⁶ 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).

an act ordinarily performed in the stream of commerce. For example, claim 1 recites “processing . . . a payment,” which is an activity that would take place whenever one is making a commercial payment. Similarly, claim 1 recites “forwarding . . . a payment notification,” which is also characteristic of commercial payment processing.

The Examiner determines the claims to be directed to business-to-business payments. Final Act. 2.

The preamble to claim 1 recites that it is a method for processing business-to-business payments. The steps in claim 1 result in processing a payment between financial institutions absent any technological mechanism other than a conventional computer for doing so.

As to the specific limitations, limitation 1 recites data storage and limitation 2 recites data reception. Limitation 3 recites data transmission. Limitations 4 and 5 recite conventional forms of data processing including rudimentary analysis to identify some rule and processing of payment data, which advise one to apply generic functions to get to these results. The limitations thus recite advice for processing an electronic payment based on an amount transmitted and an amount retrieved from some rule data. To advocate processing an electronic payment based on an amount transmitted and an amount retrieved from some rule data is conceptual advice for results desired and not technological operations.

The Specification at paragraph 1 describes the invention as relating to processing of business-to-business payments. Thus, all this intrinsic evidence shows that claim 1 is directed to 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 payment processing is a commercial payment interaction between buyer and seller. The concept of payment processing by processing an electronic payment based on an amount transmitted and an amount retrieved from some rule data is one idea for processing multiple amounts in a transaction. The steps recited in claim 1 are part of how this might conceptually be premised.

Our reviewing court has found claims to be directed to abstract ideas when they recited similar subject matter. *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*, 876 F.3d 1372, 1377–78 (Fed. Cir. 2017) (local processing of payments for remotely purchased goods).

From this we conclude that at least to this degree, claim 1 recites payment processing by processing an electronic payment based on an amount transmitted and an amount retrieved from some rule data, 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 1 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.⁷

⁷ See, e.g., *Alice*, 573 U.S. at 223, discussing *Diamond v. Diehr*, 450 U.S. 175 (1981).

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 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. Step 2 is a pure data gathering step. Limitations describing the nature of the data do not alter this. Steps 1 and 3 are conventional, generic activity, such as storing, transmitting, or displaying the results. Steps 4 and 5 recite generic computer processing expressed in terms of results desired by any and all possible means and so present no more than conceptual advice. All purported inventive aspects reside in how the data is interpreted and the results desired (which is part of the abstract idea), 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, Appellant’s claim 1 simply recites the concept of payment processing by processing an electronic payment based on an amount transmitted and an amount retrieved from some rule data as performed by a generic computer. This is no more than conceptual advice on the parameters for this concept and the generic computer processes

necessary to process those parameters, and do not recite any particular implementation.

Claim 1 does not, for example, purport to improve the functioning of the computer itself. Nor does it effect an improvement in any other technology or technical field. The 23+ pages of Specification spell out different generic equipment⁸ and parameters that might be applied using this concept and the particular steps such conventional processing would entail based on the concept of payment processing by processing an electronic payment based on an amount transmitted and an amount retrieved from some rule data under different scenarios. They do not describe any particular improvement in the manner a computer functions. Instead, claim 1 at issue amounts to nothing more than an instruction to apply payment processing by processing an electronic payment based on an amount transmitted and an amount retrieved from some rule data 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

⁸ The Specification describes at least one processor device and a memory. Specification para. 60.

exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception.

As such, additional elements in claim 1 do not integrate the recited abstract idea into a practical application. We conclude, therefore, that claim 1 is directed to achieving the result of payment processing by advising one to process an electronic payment based on an amount transmitted and an amount retrieved from some rule data, as distinguished from a technological improvement for achieving or applying that result. As indicated above, this amounts to commercial or legal interactions, which fall within certain methods of organizing human activity that constitute abstract ideas.

STEP 2B

The next issue is whether claim 1 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 “implemen [t]” an abstract idea “on . . . a computer,” that addition cannot impart patent eligibility. This conclusion accords with the pre-emption 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, 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 storing, receiving, transmitting, and analyzing data amounts to electronic data query and retrieval—one 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). *Also 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.”). None of these activities are used in some unconventional manner nor do any produce some unexpected result. Appellant does not contend they invented any of these activities. 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

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abstract.” *SAP Am., Inc. v. InvestPic LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018) (citation omitted).

Considered as an ordered combination, the computer components of Appellant’s claim 1 add nothing that is not already present when the steps are considered separately. The sequence of data storage-reception-transmission-analysis 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 1 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 1 is representative. 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 (citation omitted). 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 payment processing by processing an electronic payment based on an amount transmitted and an amount retrieved from some rule data, without significantly more.

APPELLANT’S ARGUMENTS

As to Appellant’s Appeal Brief arguments, we adopt the Examiner’s determinations and analysis from Final Action 2–4 and Answer 3–15 and reach similar legal conclusions. We now turn to the Reply Brief.

We are not persuaded by Appellant’s argument that “the Examiner makes the **unsupported assertion** that the claims contain elements that ‘are **well-understood, routine, and conventional**.’” Reply Br. 3. Such support is shown under STEP 2B *supra*.

We are not persuaded by Appellant’s argument that

the Examiner indicates *without proof* that Appellant's claims are "not even arguably inventive," which seems like an allegation directed to patentability over prior art (*not* 35 [U.S.C. §] 101). The Examiner goes further in alleging that certain types of devices have "existed for decades," which is also an allegation direct to patentability over prior art (*not* 35 [U.S.C. §] 101).

Reply Br. 4. Appellant conflates the test for novelty with the test for conventionality. Reciting a conventional computer operation is no more than saying to perform that operation on a computer. Such conventional operations are functional descriptions of results to be achieved absent technological details. "The purely functional nature of the claim confirms that it is directed to an abstract idea, not to a concrete embodiment of that idea." *Affinity Labs of Texas, LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1269 (2016).

Claims 1–22 rejected under 35 U.S.C. § 103(a) as unpatentable over Fourez and Fordyce

We are persuaded by Appellant's argument that neither Fourez nor Fordyce describes processing a payment to a buyer's institution (as recited in limitation 5). Appeal Br. 23. All of the payments in Fourez go to the seller. Fordyce describes telling a merchant to provide a discount, but does not describe processing the discount back to the buyer.

CONCLUSIONS OF LAW

The rejection of claims 1–22 under 35 U.S.C. § 101 as directed to a judicial exception without significantly more is proper.

The rejection of claims 1–22 under 35 U.S.C. § 103(a) as unpatentable over Fourez and Fordyce is improper.

CONCLUSION

The rejection of claims 1–22 is affirmed.

In summary:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1–22	101	Eligibility	1–22	
1–22	103(a)	Fourez, Fordyce		1–22
Overall Outcome			1–22	

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