



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/312,228	06/23/2014	Ilker Celikyilmaz	8223-1707011 (869US02)	7546
144885	7590	06/26/2020	EXAMINER	
The Webb Law Firm / Visa International ONE GATEWAY CENTER 420 FT. DUQUESNE BLVD, SUITE 1200 PITTSBURGH, PA 15222			PATEL, DIPEN M	
			ART UNIT	PAPER NUMBER
			3688	
			NOTIFICATION DATE	DELIVERY MODE
			06/26/2020	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@webblaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte IIKER CELIKYILMAZ, JOSEPH SPEARS,
MUHAMMAD BASSAM ADIL KHAN,
KALPANA JOGI, and DARPAN DEWAN

Appeal 2019-002523
Application 14/312,228
Technology Center 3600

Before ANTON W. FETTING, JOSEPH A. FISCHETTI, and
BIBHU R. MOHANTY, *Administrative Patent Judges*.

MOHANTY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–21. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF THE DECISION

We AFFIRM.

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Visa International Service Association (Appeal Br. 3).

CLAIMED SUBJECT MATTER

The Appellant's claimed invention relates to configuring the processing of computer operations in relation with payment processing (Spec., para 3). Claim 1, reproduced below with the italics added, is representative of the subject matter on appeal.

1. A method, comprising:
 - receiving*, in a computing apparatus, *offers*, each of the offers offered by a plurality of merchants, *wherein each of the offers has a set of offer rules related to payment transactions made in an electronic payment processing network*, wherein a transaction handler of the electronic payment processing network is configured to use offer rules to detect relevant transactions for determination of applicability of the offers;
 - identifying*, by the computing apparatus, *a plurality of merchant groups*, each merchant group comprising a plurality of merchants;
 - storing*, in the computing apparatus, *merchant hierarchy data*, wherein the merchant hierarchy data includes:
 - identifications of a plurality of transaction terminals*, each transaction terminal located at a location of an associated merchant;
 - identifications of the plurality of merchants; and
 - identifications of the plurality of merchant groups, wherein:
 - for each transaction terminal in the plurality of transaction terminals, the merchant hierarchy data identifies a single merchant in the plurality of merchants, and for each respective merchant in the plurality of merchants, the merchant hierarchy data identifies, among the plurality of merchant groups, one or more merchant groups in which the respective merchant is a member, wherein the merchant hierarchy data identifies:
 - at least a first merchant in the plurality of merchants as a member of more than one merchant group in the plurality of merchant groups, and at least a first merchant group in the plurality of merchant groups as having more than one merchant, including the first merchant, as members of the first merchant group;
 - for each offer of the offers, storing, based on offer data, the offer in the computing apparatus, such that the offer is associated with a single merchant group in the plurality of merchant groups;*

during processing of a payment transaction initiated on a first transaction terminal of the first merchant in the electronic payment processing network, wherein the first transaction terminal is located at a location of the first merchant:

retrieving, by the computing apparatus from transaction data of the payment transaction, terminal information that identifies the first transaction terminal, and based on identification of the terminal information of the first transaction terminal on which the payment transaction was initiated, determining, by the computing apparatus from the merchant hierarchy data, the more than one merchant group in which the first merchant is a member;

combining, by the computing apparatus, the transaction data of the payment transaction with a list identifying the more than one merchant group in which the first merchant is a member to generate enriched transaction data; and

applying, by a rule engine of the transaction handler, rules of the offers to the enriched transaction data to identify one or more offers applicable to the payment transaction, by querying the offers associated with the more than one merchant group in which the first merchant is a member, wherein a performance of the rule engine applying the offers is improved by reducing the number of independent offers to be evaluated by the rule engine through grouping offer rules of individual merchants as offers from merchant groups and by the comparing merchant groups in the enriched transaction data and in the offers.

THE REJECTIONS

The Examiner relies upon the following as evidence in support of the rejections:

Name	Reference	Date
Elston	US 2002/0143655 A1	Oct. 3, 2002
Matotek	US 2007/0106564 A1	May 10, 2007
Berland	US 2013/0304576 A1	Nov. 14, 2013

The following rejections are before us for review:

1. Claims 1–21 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.
2. Claims 1–21 are rejected under 35 U.S.C. § 103(a) as unpatentable over Berland, Elston, and Matotek.

FINDINGS OF FACT

We have determined that the findings of fact in the Analysis section below are supported at least by a preponderance of the evidence².

ANALYSIS

Rejection under 35 U.S.C. § 101

The Appellant argues that the rejection of claim 1 is improper because the claim is not directed to an abstract idea (Appeal Br. 14–23; Reply Br. 2). The Appellant argues further that the claim is “significantly more” than the alleged abstract idea (Appeal Br. 23–26; Reply Br. 2, 3).

In contrast, the Examiner has determined that the rejection of record is proper (Final Act. 2–8; Ans. 4–12).

We agree with the Examiner. An invention is patent eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[l]aws of nature, natural

² See *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Patent Office).

phenomena, and abstract ideas” are not patentable. *E.g.*, *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is “directed to.” *See Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk. . . .”).

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 192 (1981)); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that “a claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a

mathematical formula.” *Diehr*, 450 U.S. at 187; *see also id.* at 191 (“We view respondents’ claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula.”). Having said that, the Supreme Court also indicated that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* (internal citation omitted) (citing *Benson* and *Flook*); *see, e.g., id.* at 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”).

In January 2019, the published revised guidance on the application of § 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Guidance”). Under the Guidance, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes); and
- (2) additional elements that integrate the judicial exception into a practical application, i.e., evaluate whether the claim “appl[ies], rel[ies] on, or use[s] the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception.” (*see* Guidance, 84 Fed. Reg. at 54; *see also* MPEP § 2106.05(a)–(c), (e)–(h)).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See Guidance.

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221 (citation omitted). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (alterations in original) (quoting *Mayo*, 566 U.S. at 77). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

The Specification at paragraph 3 states that the invention generally relates to configuring the processing of computing operations in relation with payment processing. Here, the Examiner has determined that the claim sets forth an idea of itself and a method of organizing human activities (Final Act. 3). We agree in substance with the Examiner. We determine that the claim sets forth the subject matter in italics above which describes [1] “receiving . . . offers . . . wherein each of the offers has a set of offer rules related to payment transactions”, [2] “identifying . . . a plurality of merchant groups”, [3] “storing . . . merchant hierarchy data”, [4] “identifications of a plurality of transaction terminals”, [5] “for each offer of the offers, storing, based on offer data, the offer in the computing apparatus, such that the offer

is associated with a single merchant group”; [6] “during processing of a payment transaction”, [7] “retrieving . . . terminal information that identifies the first transaction terminal . . . determining, by the computing apparatus from the merchant hierarchy data, the more than one merchant group in which the first merchant is a member”, [8] “combining . . . the transaction data of the payment transaction with a list identifying the more than one merchant group in which the first merchant is a member”; and [9] “applying, by a rule engine of the transaction handler, rules of the offers to the enriched transaction data to identify one or more offers applicable to the payment transaction” which relates to the concept payment processing in which offers have been made by applying rules which is a certain method of organizing human activity and fundamental economic practice, i.e., a judicial exception. In *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.* (CAFC), 876 F.3d 1372, 1376, (Fed. Cir. 2017), the local processing of payments for remotely purchased goods was held to be an abstract concept. In *buySAFE, Inc. v. Google Inc.*, 765 F.3d 1350 (Fed. Cir. 2014) at 1355, it was held that claims drawn to creating a contractual relationship and long-familiar commercial transactions was held to be directed to an abstract idea. See *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016) where collecting information, analyzing it, and displaying results from certain results of the collection and analysis was held to be an abstract idea. A method, like the claimed method, “a process that employs mathematical algorithms to manipulate existing information to generate additional information is not patent eligible.” See *Digitech Image Techs, LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014).

We next determine whether the claim recites additional elements in the claim to integrate the judicial exception into a practical application. *See* Guidance, 84 Fed. Reg. at 54–55. The Revised Guidance references the MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) §§ 2106.05(a)–(c) and (e)–(h).

Here, the claim does not improve computer functionality, improve another field of technology, utilize a particular machine, or effect a particular physical transformation. Rather, we determine that nothing in the claims imposes a meaningful limit on the judicial exception, such that the claims are more than a drafting effort to monopolize the judicial exception.

For example, in claim 1, the additional elements beyond the abstract idea are the recited claimed “computing apparatus,” “electronic payment processing network,” and “transaction terminal[s].” The claimed limitations of these elements “do not purport to improve the functioning of the computer itself,” do not improve the technology of the technical field, and do not require a “particular machine.” Rather, they are performed using generic computer components. Further, the claim as a whole fails to effect any particular transformation of an article to a different state. The recited steps in the claim fail to provide meaningful limitations to limit the judicial exception. In this case, the claim merely uses the claimed computer elements as a tool to perform the abstract idea.

Considering the elements of the claim both individually and as “an ordered combination” the functions performed by the computer system at each step of the process are purely conventional. Each step of the claimed method does no more than require a generic computer to perform a generic computer function. Thus, the claimed elements have not been shown to

integrate the judicial exception into a practical application as set forth in the Revised Guidance which references the MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) §§ 2106.05(a)–(c) and (e)–(h).

Turning to the second step of the *Alice* and *Mayo* framework, we determine that the claim does not contain an inventive concept sufficient to “transform” the abstract nature of the claim into a patent-eligible application. Considering the claim both individually and as an ordered combination fails to add subject matter beyond the judicial exception that is not well-understood, routine, and conventional in the field. Rather the claim uses well-understood, routine, and conventional activities previously known in the art and they are recited at a high level of generality. The Specification at pages 45–48 for example describes using conventional computer components such as controllers, processors, and computers in a conventional manner. Here, the claimed generic computer components which are used to implement the claimed method are well understood, routine, or conventional in the field. The Appellant has not demonstrated that the computers described in the Specification at page 45 for instance are not general purpose computer components known to perform similar functions in a well-understood manner. Here, the claim has not been shown to be “significantly more” than the abstract idea.

The Appellant, at pages 14–22 of the Appeal Brief, has also cited to *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016) to show that the claim is not abstract but the claims in that case were not similar in scope to those here and were in contrast directed to a self-referential data table.

The Appellant, at pages 22 of the Appeal Brief, has also cited to *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016) but the claims in that case are distinguished from this case in being directed to rules for lip sync and facial expression animation.

For these above reasons the rejection of claim 1 is sustained. The Appellant has provided the same argument for the remaining claims which are drawn to similar subject matter and the rejection of these claims is sustained for the same reasons given above.

Rejection under 35 U.S.C. § 103

The Appellant argues that the rejection of claim 1 is improper because the cited prior art fails to disclose the claim limitations for “identifications of a plurality of transaction terminals, each transaction terminal located at a location of an associated merchant”, wherein the first transaction terminal “is located at a location of the first merchant”, and based on identification of the terminal information on which the payment transaction was “initiated” determining the merchant group (Appeal Br. 26).

In contrast, the Examiner has determined that the cited claim limitation is shown by Elston (Final Act. 12, Ans. 15).

We agree with the Examiner. Elston at paragraphs 156-158 discloses that a customer ordering in store can use a terminal or kiosk to connect to their account and order. Thus, Elston discloses the argued “terminal” located at the merchant location. Further, while the Appellant at page 27 of the Appeal Brief argues that Elston is drawn to a remote ordering system the claims are instead drawn to payment processing and do not exclude remote ordering. Regardless, Elston has disclosed the identified claim limitation as

identified above. For these above reasons, the rejection of claim 1 under 35 U.S.C. § 103(a) is sustained. The Appellant has provided the same arguments for the remaining claims, and the rejection of these claims is sustained as well.

CONCLUSIONS OF LAW

We conclude that Appellant has not shown that the Examiner erred in rejecting Claims 1–21 under 35 U.S.C. § 101.

We conclude that Appellant has not shown that the Examiner erred in rejecting Claims 1–21 are rejected under 35 U.S.C. § 103(a) as unpatentable over Berland, Elston, and Matotek.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–21	101	Eligibility	1–21	
1–21	103	Berland, Elston, Matotek	1-21	
Overall Outcome			1–21	

TIME PERIOD FOR RESPONSE

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