



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

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO. Includes details for application 16/662,799 filed 10/24/2019 by Salil Jain, attorney 744674, confirmation 6993. Also includes examiner KANAAN, TONY P, art unit 3695, and notification date 03/01/2024 via electronic mode.

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):

Chgpatent@leydig.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SALIL JAIN ¹

Appeal 2022-003895
Application 16/662,799
Technology Center 3600

Before MURRIEL E. CRAWFORD, ANTON W. FETTING, and
BRADLEY B. BAYAT, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant seeks our review under 35 U.S.C. § 134 of the Examiner’s final rejection of claims 1–24. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF DECISION

We AFFIRM.

¹ “Appellant” refers to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Aetna Inc. Appeal Br. 1.

THE INVENTION

Appellant claims a method for detection of a common point of compromise. (Spec. ¶ 1, Title).

Claim 1 is representative of the subject matter on appeal.

1. A common point of compromise (CPC) detection system, comprising one or more processors and one or more non-transitory computer-readable mediums having processor-executable instructions stored thereon, wherein the processor executable instructions, when executed by the one or more processors, facilitate:

obtaining a data set of transaction data corresponding to a plurality of transactions performed by a plurality of users at a plurality of merchants;

obtaining an identification of one or more target merchants (MB) where fraudulent transactions have taken place;

detecting a potential CPC using the transaction information and the identification of the one or more target merchants (MB), wherein detecting the potential CPC includes:

determining respective correlations between the one or more target merchants (MB) and each respective merchant (MA_i) of a set of merchants (MA), wherein the set of merchants (MA) includes merchants of the plurality of merchants at which a user's payment information was used in a transaction prior to being used in a transaction at the one or more target merchants (MB), wherein a respective correlation is indicative of whether there is a relationship between: (1) the one or more target merchants (MB) at which fraudulent transactions have taken place; and (2) a respective merchant (MA_i) at which a user's payment information was used prior to being used at the one or more target merchants (MB); and

detecting the potential CPC based on the determined correlations; and

causing responsive operations to be performed in response to the detection of the potential CPC, wherein the responsive operations include:

deactivating forms of payment corresponding to the payment information used at the detected potential CPC;
and
triggering new cards to be sent out to affected users whose payment information was used at the detected potential CPC.

THE REJECTION

Claims 1–24 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

ANALYSIS

35 U.S.C. § 101 REJECTION

We will sustain the rejection of claims 1–24 under 35 U.S.C. § 101.

The Supreme Court

set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. First, . . . determine whether the claims at issue are directed to one of those patent-ineligible concepts. . . . If so, . . . 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 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)) (citations omitted).

To perform this test, we must first determine whether the claims at issue are directed to a patent-ineligible concept. The Federal Circuit has explained that “the ‘directed to’ inquiry applies a stage-one filter to claims, considered in light of the [S]pecification, based on whether ‘their character as a whole is directed to excluded subject matter.’” *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)). It asks whether the focus of the claims is on a specific improvement in relevant technology or on a process that itself qualifies as an “abstract idea” for which computers are invoked merely as a tool. *See id.* at 1335–36.

In so doing we apply a “directed to” two prong test: 1) evaluate whether the claim recites a judicial exception, and 2) if the claim recites a judicial exception, evaluate whether the judicial exception is integrated into a practical application. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50, 50–57 (Jan. 7, 2019) (“*Guidance*”).²

The Examiner determines that the claims recite determining respective correlations between the one or more target merchants MB and each respective merchant MA_i of a set of merchants MA, detecting the potential CPC (common point of contact) based on the determined correlations; and outputting the detected potential CPC to facilitate responsive operations being performed in response to the detection of the potential CPC, i.e., performing a business operation. The Examiner determines that the claimed business operation is a certain method of organizing human activity. (Final

² The MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) incorporates the revised guidance and subsequent updates at Section 2106 (9th ed. Rev. 07.2022, rev. Feb. 2023).

Act. 4). The Examiner finds that the claimed computer components are recited at a high level of generality and are merely invoked as tools to perform the existing process and do not integrate the recited judicial exception into a practical application. The Examiner further finds that the claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the additional elements in the claim amount to no more than the instructions to apply the exception using a generic computer.

The Specification states that identity theft is a major problem affecting millions of people worldwide. (Spec. ¶ 1). A fraudster often starts with one or more test transactions to see if the stolen payment information works. (Spec. ¶ 2). The present invention provides a common point of compromise (CPC) detection system. (Spec. ¶ 3). The CPC is a term which can be used to describe a merchant, such as a business or person, or an automated teller machine or point of sale device associated therewith, which has been compromised such that a fraudster is able to obtain payment information therefrom. (Spec. ¶ 30).

Consistent with this disclosure claim 1, for example, recites “obtaining a data set of transaction data,” “obtaining an identification of one or more target merchants,” “detecting a potential CPC using the transaction information, “deactivating forms of payment,” and “triggering new cards to be sent.”

We thus agree with the Examiner’s findings that claim 1, for example, is directed to controlling the behavior of persons concerning preventing fraud. Preventing fraud is a fundamental economic practice which is a certain method of organizing human activity.

Turning to the second prong of the “directed to test,” claim 1 requires a “processor,” and “non-transitory computer-readable mediums,” these recitations do not impose “a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception.” *Guidance*, 84 Fed. Reg. at 53. We find no indication in the Specification, nor does Appellant direct us to any indication, that the operations recited in independent claim 1 invoke any inventive programming, require any specialized computer hardware or other inventive computer components, i.e., a particular machine, or that the claimed invention is implemented using other than generic computer components to perform generic computer functions. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (“[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.”).

We also find no indication in the Specification that the claimed invention affects a transformation or reduction of a particular article to a different state or thing. Nor do we find anything of record, short of attorney argument, that attributes any improvement in computer technology and/or functionality to the claimed invention or that otherwise indicates that the claimed invention integrates the abstract idea into a “practical application,” as that phrase is used in the revised *Guidance*. *See Guidance*, 84 Fed. Reg. at 55.

In this regard, the recitations do not affect an improvement in the functioning of the processor or the mediums or other technology, do not recite a particular machine or manufacture that is integral to claim 1, and does not transform or reduce a particular article to a different state or thing.

Id. Thus, claim 1 recites a judicial exception that is not integrated into a practical application and thus is an “abstract idea.”

Turning to the second step of the *Alice* analysis, because we find that claim 1 is directed to an abstract idea, the claim must include an “inventive concept” in order to be patent-eligible, i.e., there must be an element or combination of elements that is sufficient to ensure that the claim in practice amounts to significantly more than the abstract idea itself. *See Alice*, 573 U.S. at 217–18 (alteration in original) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)).

The introduction of a computer elements into the claim does not alter the analysis at *Alice* step two.

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

Alice, 573 U.S. at 223 (alterations in original) (citations omitted).

Instead, the relevant question is whether claim 1 here does more than simply instruct the practitioner to implement the abstract idea on a generic computer. *Id.* at 225. It does not.

Based on Appellant’s description in the Specification, we find these elements to be well-understood, routine, or conventional. Appellant does not contend that it invented any of these elements or the basic computer functions or that these elements were unknown in the art as of the time of the invention. *Affinity Labs of Texas, LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1270 (Fed. Cir. 2016). There is no technological improvement to the processor or mediums used. We note that computers “have become the substrate of our daily lives—the ‘basic tool[],’ *Gottschalk v. Benson*, 409 U.S. 63, 67[] (1972), of a great many of our social and economic interactions—generic computer functions, such as storing, analyzing, organizing, and communicating information, carry no weight in the eligibility analysis. *See Alice*, 134 S.Ct. at 2357.” *In re Marco Guldenaar Holding B.V.*, 911 F.3d 1157, 1165 (Fed. Cir. 2018) (Mayer concurring).

Taking the claim elements separately, the function performed by the processor at each step of the process is purely conventional. Using a computer to retrieve, select, and apply decision criteria to data and modify the data as a result amounts to electronic data query and retrieval—one of the most basic functions of a computer. All of these computer functions are well-understood, routine, conventional activities previously known to the trading industry. *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (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”). In short, each step does no more than require a generic computer to perform generic computer functions. As to the data operated

upon, “even if a process of collecting and analyzing information is ‘limited to particular content’ or a particular ‘source,’ that limitation does not make the collection and analysis other than abstract.” *SAP Am. Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018).

Considered as an ordered combination, the processor and mediums of Appellant’s claim 1 add nothing that is not already present when the steps are considered separately. The sequence of data reception-analysis-access/display is equally generic and conventional or otherwise held to be abstract. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (sequence of receiving, selecting, offering for exchange, display, allowing access, and receiving payment recited an abstraction), *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*, 876 F.3d 1372, 1378 (Fed. Cir. 2017) (holding that sequence of data retrieval, analysis, modification, generation, display, and transmission was abstract), *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1339 (Fed. Cir. 2017) (holding sequence of processing, routing, controlling, and monitoring was abstract). The ordering of the steps is, therefore, ordinary and conventional.

Claim 1 does not, for example, purport to improve the functioning of the processor or mediums. As we stated above, claim 1 does not affect an improvement in any other technology or technical field. Thus, claim 1 at issue amounts to nothing significantly more than instructions to apply the abstract idea of information access 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 226.

We have reviewed all the arguments (Appeal Br. 2–21 ; Reply Br. 2–5) Appellant has submitted concerning the patent eligibility of the claims

before us that stand rejected under 35 U.S.C. § 101. We find that our analysis above substantially covers the substance of all the arguments, which have been made. But, for purposes of emphasis, we will address various arguments in order to make individual rebuttals of same.

We are not persuaded or error on the part of the Examiner by Appellant's argument that the abstract idea is integrated into a practical application because the claim uses the result of data processing in a specific and practical way. (Appeal Br. 6). The problem with this argument is that it is not directed to the considerations that are indicative of a practical application. According to the *Guidance* some factors that should be considered in determining whether the judicial exception is integrated into a practical application are: (1) whether the additional elements reflect an improvement in the functioning of a computer or other technology or technical field, (2) whether the additional elements that apply or use the judicial exception to affect a particular treatment or prophylaxis for a disease or medical condition, (3) whether the additional elements implement a judicial exception with or use a judicial exception in conjunction with a particular machine, (4) whether the additional elements affect a transformation or reduction of a particular article to a different state or thing and (5) whether the additional elements use the judicial exception in some other meaningful way beyond generally linking the judicial exception to a particular technological environment. *Guidance*, 84 Fed. Reg. 55. As Appellant has not addressed these factors in this argument, the argument is not persuasive.

We also do not agree with Appellant that the claims are similar to those of Example 37 of the *Guidance*. The Office determined that

hypothetical claim 1 of Example 37 integrates the recited abstract idea into a practical application because the additional elements “recite a specific manner of automatically displaying icons to the user based on usage[,] which provides a specific improvement over prior systems, resulting in an improved user interface for electronic devices.” *Id.* at 2–3. There is no improved user interface recited in claim 1. In fact, there is no user interface recited at all.

We are not persuaded of error on the part of the Examiner by Appellant’s argument that the claimed invention provides a specific implementation of a solution to a problem arising in the technological field of big data processing of transaction data to detect CPCs. First, this argument is not persuasive because, although as argued by Appellant, the Specification discloses at paragraph 42 that the claimed process is performed on millions of transactions, claim 1 does not recite that the process is performed on millions of transactions. Rather, claim 1 recites a “data set of transaction data corresponding to a plurality of transactions performed by a plurality of users at a plurality of merchants.” As such, claim 1 is broad enough to cover only two transactions, two users and two merchants and as such does not recite millions of transactions or “big data.” In addition, this argument is not persuasive because Appellant does not explain what the problem was and how the instant invention solved it.

In view of the foregoing, we will sustain the Examiner’s rejection of claim 1 and claims 2–9, 23 and 24 dependent therefrom.

We will also sustain the rejection of claims 10–22 because Appellant makes the similar arguments in response to the rejection of these claims as was made in response to the rejection of claim 1.

CONCLUSION

We conclude the Examiner did not err in rejecting claims 1–24 under 35 U.S.C. § 101.

DECISION

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–24	101	Eligibility	1–24	

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