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.
13/246,783	09/27/2011	Rosann Woods	8223-1706971(P-41717US01)	8242

144885 7590 03/02/2020		EXAMINER	
The Webb Law Firm / Visa International		REFAI, SAM M	
ONE GATEWAY CENTER			
420 FT. DUQUESNE BLVD, SUITE 1200		ART UNIT	PAPER NUMBER
PITTSBURGH, PA 15222		3681	
		NOTIFICATION DATE	DELIVERY MODE
		03/02/2020	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 ROSANN WOODS

_____

Appeal 2018–005014
Application 13/246,783
Technology Center 3600

_____

Before: JOHN A. EVANS, JASON J. CHUNG, and SCOTT E. BAIN,
Administrative Patent Judges.

EVANS, *Administrative Patent Judge*.

DECISION ON APPEAL[1]

Appellant seeks our review under 35 U.S.C. § 134(a) of the
Examiner's Final rejection of claims 1–5, 8–10, and 12–20. App. Br. 1.
Claims 6, 7, and 11 are canceled. Final Act. 2. We have jurisdiction under
35 U.S.C. § 6(b).

We AFFIRM.[2]

---

[1] We use the word "Appellant" to refer to "Applicant" as defined in
37 C.F.R. § 1.42. Appellant identifies Visa International Service
Association as the real party in interest. App. Br. 3.

[2] Rather than reiterate the arguments of Appellant and the Examiner, we
refer to the Appeal Brief filed January 8, 2018, ("App. Br."); the Reply Brief
filed April 11, 2018, ("Reply Br."); the Examiner's Answer mailed February

STATEMENT OF THE CASE

The claims relate to systems and methods to structure services in tiers and provide services as rewards in accordance with the tiers. *See* Abstract.

Invention

Claims 1, 16, and 20 are independent. An understanding of the invention can be derived from a reading of claim 1, which is reproduced in Table 1.

Rejections[3]

Claims 1–5, 8–10, and 12–20 stand rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more. Final Act. 2–11.

Allowable Subject Matter

The Examiner finds claims 1–5, 8–10, and 12–20 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. § 101 set forth in the Final Action. Final Act. 11.

ANALYSIS

We have reviewed the rejections of claims 1–5, 8–10, and 12–20 in light of Appellant's arguments that the Examiner erred. We have considered in this Decision only those arguments Appellant actually raised in the Brief. Any other arguments which Appellant could have made but chose not to

---

21, 2018, ("Ans."); the Final Action mailed August 8, 2017, ("Final Act."); and the Specification filed July 1, 2013, ("Spec.") for their respective details.

[3] The present application was examined under the pre-AIA first to invent provisions. Final Act. 2.

make in the Brief are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).
We provide the following explanation to highlight and address specific
arguments and findings primarily for emphasis. We consider Appellant's
arguments as they are presented in the Appeal Brief, pages 13–25.

Claims 1–5, 8–10, and 12–20: INELIGIBLE SUBJECT MATTER

Appellant argues these claims as a group in view of the recitations of
claim 1.[4] Therefore, we decide the appeal of the 35 U.S.C. § 101 rejection
on the basis of representative claim 1 and refer to the rejected claims
collectively herein as "the claims." *See* 37 C.F.R. § 41.37(c)(1)(iv); *see also*
In re King, 801 F.2d 1324, 1325 (Fed. Cir. 1986).

De novo review

Appellant contends "the entirety of the claims were not substantively
examined and every rejection necessary fails for this reason alone." App.
Br. 13.

We review the record *de novo*. *SiRF Tech., Inc. v. Int'l Trade*

---

[4] Appellant argues "[c]laims 1, 16, and 20 require, inter alia, the following
two steps." App. Br. 13. Appellant further argues the "Office Action
glosses over the dependent claims with essentially the same, duplicative
analysis." App. Br. 24. Appellant's contentions do not rise to the level of
arguing the separate patentability of the claims. *In re Dance*, 160 F.3d 1339,
1340 n.2 (Fed. Cir. 1998) (noting that dependent claims not argued
separately on the merits rise or fall with the independent claim to which they
relate). When claims are not argued separately, the consequence is not to
treat the missing argument as an admission but rather to treat the affected
claims as standing or falling together. *C.W. Zumbiel Co., Inc. v. Kappos*,
702 F.3d 1371, 1378 n.2 & 1381 n.4 (Fed. Cir. 2012); *see also In re Dillon*,
919 F.2d 688, 695 (Fed. Cir. 1990) (en banc).

Comm'n, 601 F.3d 1319, 1331 (Fed. Cir. 2010) ("Whether a claim is drawn to patent-eligible subject matter is an issue of law that we review de novo."). Based upon our review of the record in light of recent policy guidance with respect to patent-eligible subject matter rejection under 35 U.S.C. § 101, we affirm the rejection of the claims for the specific reasons discussed below.[5]

Preemption

Appellant contends claim 1 does not pose any risk of preempting, or monopolizing, any idea the Office may identify as abstract. *See* App. Br. 24. Although preemption may denote patent ineligibility, its absence does not demonstrate patent eligibility. *See FairWarning, IP, LLC v. Iatric Systems, Inc.*, 839 F.3d 1089, 1098 (Fed. Cir. 2016). For claims covering a patent-ineligible concept, preemption concerns "are fully addressed and made moot" by an analysis under the *Mayo/Alice* framework. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). We conduct such an analysis below.

35 U.S.C. § 101

Section 101 provides that a patent may be obtained for "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." *See* 35 U.S.C. § 101. The Supreme Court has long recognized, however, that 35 U.S.C. § 101 implicitly excludes "[l]aws of nature, natural phenomena, and abstract ideas" from the realm of patent-eligible subject matter, as monopolization of these "basic tools of

---

[5] *See* 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Revised Guidance, 84 Fed. Reg.").

scientific and technological work" would stifle the very innovation that the patent system aims to promote. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014) (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)); *see also Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–78 (2012); and *Diamond v. Diehr*, 450 U.S. 175, 185 (1981).

Under the mandatory Revised Guidance, we reconsider whether Appellant's claims recite:

1. any **judicial exceptions**, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human interactions such as a fundamental economic practice, or mental processes), and

2. **additional elements** that integrate the judicial exception into a practical application (*see* 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 reach the issue of 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.

A. Whether the claims recite a judicial exception

The Revised Guidance extracts and synthesizes key concepts identified by the courts as abstract ideas to explain that the abstract-idea exception includes the following groupings of subject matter, when recited as such in a claim limitation(s) (that is, when recited on their own or *per se*): (a) mathematical concepts,[6] i.e., mathematical relationships, mathematical formulas, equations,[7] and mathematical calculations;[8] (b) certain methods of organizing human activity—fundamental economic principles or practices (including hedging, insurance, mitigating risk); commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations); managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or

---

[6] *Bilski v. Kappos*, 561 U.S. 593, 611 (2010) ("The concept of hedging . . . [reduced] to a mathematical formula . . . . is an unpatentable abstract idea.").

[7] *Diehr*, 450 U.S. at 191 ("A mathematical formula as such is not accorded the protection of our patent laws."); *Parker v. Flook*, 437 U.S. 584, 594 (1978) ("[T]he discovery of [a mathematical formula] cannot support a patent unless there is some other inventive concept in its application.").

[8] *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018) (holding that claims to a "series of mathematical calculations based on selected information" are directed to abstract ideas).

instructions);[9] and (c) mental processes—concepts performed in the human mind (including observation, evaluation, judgment, opinion).[10]

The preamble of independent claim 1 recites: "[a] computer-implemented method, comprising." Each limitation, recited in the body of the claim, is analyzed in Table I against the categories of abstract ideas as set forth in the Revised Guidance. This analysis renders moot Appellant's contention that "[t]he errors with the Section 101 analysis start with the Examiner's interpretation of the claims which admittedly disregards two entire steps." App. Br. 13; *see also* Reply Br. 2.

Claim 1	Revised Guidance, p. 52
[a][11] providing a computing apparatus comprising:	Insignificant extra-solution activity.
[b] a transaction handler configured on an electronic payment processing network connecting separate computers, including: transaction terminals configured to initiate transactions of payments in the electronic payment processing network;	Conventional computing apparatus.

---

[9] *Alice*, 573 U.S. at 219–20 (concluding that use of a third party to mediate settlement risk is a "fundamental economic practice" and thus an abstract idea); *see also* Revised Guidance, at 52 n.13 for a more extensive listing of "certain methods of organizing human activity" that have been found to be abstract ideas.

[10] *Mayo*, 566 U.S. at 71 ("[M]ental processes[ ] and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.") (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

[11] Step designators, e.g., "[a]," were added to facilitate discussion.

[c] first computers controlling consumer accounts from which the payments are made, including an account of a user;	Certain methods of organizing human activity, i.e., managing relationships or interactions between people.
[d] second computers controlling merchant accounts in which the payments are received;	Certain methods of organizing human activity, i.e., managing relationships or interactions between people.
[e] a data warehouse storing account data identifying an account feature of the account of the user, the account feature associated with a plurality of services organized in tiers, the plurality of services provided by a plurality of different service providers; and	Certain methods of organizing human activity, i.e., managing relationships or interactions between people.
[f] a portal coupled with the data warehouse configured to provide a user interface for enrollment in at least some of the services;	Certain methods of organizing human activity, i.e., managing relationships or interactions between people.
[g] monitoring, by the transaction handler configured in the electronic payment processing network, transactions in the account of the user;	Mental processes, i.e., concepts performed in the human mind including observation, evaluation, judgment, opinion.
[h] measuring, by the computing apparatus, a spending level of the user within a predetermined period of time based on settled transactions recorded by the transaction handler, wherein the spending level includes a count of international airline tickets that are purchased using the account of the user within the	Mental processes, i.e., concepts performed in the human mind including observation, evaluation, judgment, opinion.

predetermined period of time;	
[i] receiving, in the user interface from the user, a custom designed tier structure for the account feature based on a set of predetermined rules;	Mathematical concepts, i.e., mathematical relationships, formulas, equations, or calculations.
[j] enrolling, using the user interface, the user in a first set of services of the plurality of services, including a first service in the plurality of services, for the predetermined period of time;	Certain methods of organizing human activity, i.e., managing relationships or interactions between people.
[k] determining, by the computing apparatus, a tier level of the account feature based on the count of international airline tickets that are purchased using the account of the user within the predetermined period of time;	Mathematical concepts, i.e., mathematical relationships, formulas, equations, or calculations.
[l] in response to a determination that a position of the first service in the tiers is below the tier level of the account feature in accordance with the tier structure, providing the first service to the user at a first cost; and	Certain methods of organizing human activity, i.e., managing relationships or interactions between people.
[m] in response to an increase in the count of international airline tickets that are purchased using the account of the user within the predetermined period of time to above a threshold, updating, by the computing apparatus, the tier level of the account feature in accordance with the tier structure to above the	Mathematical concepts, i.e., mathematical relationships, formulas, equations, or calculations.

| position of the first service in the tiers, waiving the first cost in providing the first service to the user, and offering the user to enroll, via the user interface, in a second set of services of the plurality of services, the second set of services including: the first set of services, and at least a third service not in the first tier. | |

In view of Table I, we find limitations [c]–[m] of independent Claim 1 recites a judicial exception, *per se*, i.e., at least one abstract idea in each of the three categories set forth in the Revised Guidance. Our analysis renders moot Appellant's contention the Examiner's analysis has improperly found the claims to recite abstract ideas. *See* Reply Br. 3.

Step 2A(ii): Judicial Exception Integrated into a Practical Application?

If the claims recite a patent-ineligible concept, as we conclude above, we proceed to the "practical application" *Step 2A(ii)* wherein we determine whether the recited judicial exception is integrated into a practical application of that exception by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application.

For the reasons which follow, we conclude that Appellant's claims do not integrate the judicial exception into a practical application.

MPEP § 2106.05(a): "Improvements to the Functioning of a Computer or to Any Other Technology or Technical Field."

"In determining patent eligibility, examiners should consider whether the claim 'purport(s) to improve the functioning of the computer itself'" or "any other technology or technical field." MPEP § 2106.05(a).

With respect to technological improvements, Appellant analogizes to *Enfish* and contends "the rejections should also be reversed because it is clear that the claims are directed to specific improvements in the specific field of electronic rewards systems for airline tickets." App. Br. 19–20 (citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (Under *Alice*, claims purporting to "improv[e] an existing technological process, might not succumb to the abstract idea exception.").

Alice held that "method claims, which merely require generic computer implementation, fail to transform that abstract idea into a patent-eligible invention." *Alice*, 134 S.Ct. 2357. The *Alice* Court noted the *Mayo* claims were directed to a method for measuring metabolites in the bloodstream in order to calibrate the appropriate dosage of thiopurine drugs in the treatment of autoimmune diseases. *Id.* It seems to us that measuring concentrations of thiopurine metabolites in blood in order to calibrate dosages rises, at least, to the technological level required for measuring the claimed "count of international airline tickets that are purchased using the account of the user" and calibrating a "tier level of the account," as claimed. Because methods directed to calibrating dosage levels fails to meet a sufficient technology standard, we must find calibrating tier levels of an account based on ticket sales must also fail.

The claims collect data, recognize certain data within the collected data set, and present the data for display, which the courts have recognized as abstract. *See Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1347 (Fed. Cir. 2014).

MPEP § 2106.05(b) Particular Machine

The *Bilski* machine-or-transformation test is only applicable to method (process) claims on appeal in the present application. Appellant discloses generic computer devices. *See* Spec. ¶ 272 ("In one embodiment, a computing apparatus is configured to include some of the modules or components illustrated in Figures 1, 2 and 14, such as the transaction handler (103), the portal (143), the issuer processor (145), the acquirer processor (147), the feature offer engine (113), the notification engine (117), the procurement engine (119), and their associated storage devices, such as the data warehouse (149)."). Nor do we find disclosure of anything other than generic computer hardware or software.

MPEP § 2106.05(c) Particular Transformation

This section of the MPEP guides: "Another consideration when determining whether a claim recites significantly more is whether the claim effects a transformation or reduction of a particular article to a different state or thing." "Transformation and reduction of an article to a different state or thing is *the clue* to the patentability of a process claim that does not include particular machines." *See Bilski*, 561 U.S. at 658 (quoting *Benson*, 409 U.S. at 70).

The claims select and analyze certain electronic data. The selection of electronic data is not a "transformation or reduction of an *article* into a

different state or thing constituting patent-eligible subject matter[.]" *See In re Bilski*, 545 F.3d 943, 962 (Fed. Cir. 2008) (emphasis added); *see also CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011) ("The mere manipulation or reorganization of data . . . does not satisfy the transformation prong."). Applying this guidance here, we conclude Appellant's method claims fail to satisfy the transformation prong of the *Bilski* machine-or-transformation test.

MPEP § 2106.05(e) Other Meaningful Limitations

This section of the MPEP guides:

Diamond v. Diehr provides an example of a claim that recited meaningful limitations beyond generally linking the use of the judicial exception to a particular technological environment. 450 U.S. 175 . . . (1981). In *Diehr*, the claim was directed to the use of the Arrhenius equation (an abstract idea or law of nature) in an automated process for operating a rubber-molding press. 450 U.S. at 177-78. . . . The Court evaluated additional elements such as the steps of installing rubber in a press, closing the mold, constantly measuring the temperature in the mold, and automatically opening the press at the proper time, and found them to be meaningful because they sufficiently limited the use of the mathematical equation to the practical application of molding rubber products. 450 U.S. at 184, 187 . . . . In contrast, the claims in *Alice Corp. v. CLS Bank International* did not meaningfully limit the abstract idea of mitigating settlement risk. 573 U.S. . . . . In particular, the Court concluded that the additional elements such as the data processing system and communications controllers recited in the system claims did not meaningfully limit the abstract idea because they merely linked the use of the abstract idea to a particular technological environment (i.e., "implementation via computers") or were well-understood, routine, conventional activity.

MPEP § 2106.05(e).

13

"[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. Similarly as in *Alice*, we find that "[t]aking the claim elements separately, the function performed by the computer at each step of the process is '[p]urely conventional.'" *Id.* "In short, each step does no more than require a generic computer to perform generic computer functions." *Id.* We find that Appellant's claims do not add meaningful limitations beyond generally linking the use of the judicial exception to a particular technological environment.

MPEP § 2106.05(f) Mere Instructions to Apply an Exception

Appellant does not persuasively argue that their claims do any more than to merely invoke generic computer components merely as a tool in which the computer instructions apply the judicial exception.

MPEP § 2106.05(g) Insignificant Extra-Solution Activity

The claims acquire and display data, which are classic examples of insignificant extra-solution activity. *See, e.g.*, *Bilski*, 545 F.3d at 963 (en banc), *aff'd sub nom, Bilski*, 561 U.S. 593.

MPEP § 2106.05(h) Field of Use and Technological Environment

> [T]he Supreme Court has stated that, even if a claim does not wholly pre-empt an abstract idea, it still will not be limited meaningfully if it contains only insignificant or token pre- or post-solution activity—such as identifying a relevant audience, a category of use, field of use, or technological environment.

Ultramercial, Inc. v. Hulu, LLC, 722 F.3d 1335, 1346 (Fed. Cir. 2013). We find the claims manipulate "customer spending levels," which is simply a

field of use that attempts to limit the abstract idea to a particular technological environment. We do not find Appellant's arguments to be persuasive because "[t]he courts have also identified examples in which a judicial exception has not been integrated into a practical application." Revised Guidance, 84 Fed. Reg. 55. The claims fail to recite a practical application where the additional element does more than generally link the use of a judicial exception to a particular technological environment or field of use. *Id.* The mere application of an abstract idea in a particular field is not sufficient to integrate the judicial exception into a practical application. *See id.* at 55 n.32. In view of the foregoing, we conclude the claims are "directed to" a judicial exception.

3.   Well-understood, routine, conventional

Because the claims recite a judicial exception and do not integrate that exception into a practical application, we must then reach the issue of whether the claim adds a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field. Revised Guidance, 84 Fed. Reg. 56.

The written description describes the claimed computer system consistent with its being "well-understood, routine, [and] conventional:"

> [i]n one embodiment, a computing apparatus is configured to include some of the modules or components illustrated in Figures 1, 2 and 14, such as the transaction handler (103), the portal (143), the issuer processor (145), the acquirer processor (147), the feature offer engine (113), the notification engine (117), the procurement engine (119), and their associated storage devices, such as the data warehouse (149).

Spec. ¶ 272.

4.   Specified at a high level of generality

It is indicative of the absence of an inventive concept where the claims simply append well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. Revised Guidance, 84 Fed. Reg. 56.

The claims fail to recite any specific steps of an algorithm, nor does Appellant cite any Specification disclosure for the required specificity.

We find the limitations are specified at such a high level of generality consistent with the absence of an inventive concept. Considering the claim limitations as an ordered combination adds nothing to the abstract idea that is not already present when the limitations are considered separately. *See Mayo*, 566 U.S. at 79. The ordered combination of limitations amounts to nothing more than certain mental processes implemented with generic computer components that operate "in a conventional way." *See also Alice*, 573 U.S. at 225–26. Therefore, we conclude that none of the claim limitations, viewed "both individually and as an ordered combination," amount to significantly more than the judicial exception in order to sufficiently transform the nature of the claims into patent-eligible subject matter. *See Alice*, 573 U.S. at 217 (quotations omitted) (quoting *Mayo*, 566 U.S. at 79).

Remaining claims

Independent claims 16 and 20 must fall for the reasons adduced for claim 1. "Regardless of what statutory category ('process, machine, manufacture, or composition of matter,' 35 U.S.C. § 101) a claim's language is crafted to literally invoke, we look to the underlying invention for patent-eligibility purposes." *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1374 (Fed. Cir. 2011). Here, it is clear that the invention underlying both independent claims 16 and 20 is the method claimed in claim 1. With respect to the dependent claims, Appellant fails to argue any limitation affirmatively integrates the abstract ideas into an inventive concept.

In view of the foregoing, we sustain the rejection of claims 1–5, 8–10, and 12–20 under 35 U.S.C. § 101.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C.§	Reference(s)/Basi	Affirmed	Reversed
1–5, 8–10, and 12–20	101	Eligibility	1–5, 8–10, and 12–20	--

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv). *See* 37 C.F.R. § 41.50(f).

AFFIRMED