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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte EDWARD W. FORDYCE, LEIGH AMARO,
MICHELLE ENG WINTERS, ALFRED WILLIAM GRIGGS,
LAURA DIGIOACCHINO, DIANE C. SALMON, KEVIN PAUL SIEGEL,
KAUSHIK SUBRAMANIAN, and JAMES ALAN VONDERHEIDE

Appeal 2019-004142
Application 14/313,795
Technology Center 3600

Before MURRIEL E. CRAWFORD, JOSEPH A. FISCHETTI, and
TARA L. HUTCHINGS, *Administrative Patent Judges*.

HUTCHINGS, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's
final rejection of claims 1–21. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the term “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Our Decision references Appellant's Specification (“Spec.,” filed June 24, 2014), Appeal Brief (“Appeal Br.,” filed Jan. 28, 2019), Reply Brief (“Reply Br.,” filed May 6, 2019), the Examiner's Answer (“Ans.,” mailed Mar. 5, 2019), and Final Office Action (“Final Act.,” mailed Aug. 27, 2018). Appellant identifies Visa U.S.A. as the real party in interest. Appeal Br. 3.

CLAIMED INVENTION

Appellant's claimed invention "relate[s] to the processing of transaction data, such as records of payments made via credit cards, debit cards, prepaid cards, etc., and/or providing information based on the processing of the transaction data." Spec. ¶ 2.

Claims 1, 10, and 18 are the independent claims on appeal. Claim 1, reproduced below with bracketed notations added, is illustrative of the claimed subject matter:

1. A computer-implemented method, comprising:
 - [(a)] providing a computing apparatus having:
 - a transaction handler of an electronic payment processing network, wherein the transaction handler interconnects acquirer processors and issuer processors in the electronic payment processing network; and
 - a data warehouse storing an account identifier in association with a loyalty program of a merchant;
 - [(b)] receiving, in the transaction handler of the computing apparatus via the electronic payment processing network and from an acquirer processor controlling a merchant account of the merchant, an authorization request for a payment from an issuer processor to the acquirer processor, wherein the issuer processor controls a consumer account identified by the account identifier;
 - [(c)] processing, by the transaction handler, the authorization request for the payment from the issuer processor to the acquirer processor, including propagating the authorization request to the issuer processor in the electronic payment processing network to generate an authorization response for the payment from the issuer processor to the acquirer processor, the issuer processor to make the payment on behalf of a customer, and the acquirer processor to receive the payment on behalf of a merchant;
 - [(d)] during the processing of the authorization request for the payment at the transaction handler,

determining, by the computing apparatus and from the authorization request, the account identifier issued by an issuer, and

determining, by the computing apparatus, that the account identifier is associated with the loyalty program of the merchant based on the data warehouse storing the account identifier in association with a loyalty program of a merchant; and

[(e)] in response to a determination that the account identifier is associated with the loyalty program, providing, by the transaction handler of the computing apparatus in the authorization response transmitted to the acquirer processor for the payment from the issuer processor to the acquirer processor requested in the authorization request, an indicator identifying that a user of the account identifier is enrolled in the loyalty program of the merchant.

REJECTIONS

Claims 1–21 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

Claims 1–21 are rejected under 35 U.S.C. § 103(a) as unpatentable over Etheredge (US 2010/0106589 A1, pub. Apr. 29, 2010) and Fordyce (US 2008/0059306 A1, pub. Mar. 6, 2008).

ANALYSIS

Patent-Ineligible Subject Matter

Appellant argues the independent claims as a group. Appeal Br. 13–21. We select independent claim 1 as representative. Independent claims 10 and 18 stand or fall with claim 1.

Under 35 U.S.C. § 101, an invention is patent eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and

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

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice Corp.*, 573 U.S. at 217. The first step in that analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are not directed to a patent-ineligible concept, e.g., an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. at 79, 78). This is “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.’” *Id.* at 217–18 (alteration in original).

In rejecting the pending claims under 35 U.S.C. § 101, the Examiner determined that the claims are directed to “receiving an authorization request for payment, processing the authorization request, determining authorization, providing authorization including a loyalty indication,” *i.e.*, an abstract idea similar to other concepts related to the collection, analysis, and manipulation of data that the courts have held abstract. Final Act. 5 (citing *Intellectual Ventures I LLC v. Capital One Financial Corp.*, 850 F.3d 1332 (Fed Cir. 2017), and *Classen Immunotherapies, Inc. v. Biogen IDEC*, 659

F.3d 1057 (Fed. Cir. 2011)). The Examiner further determined that the claims do not include additional elements sufficient to amount to significantly more than the judicial exception itself. *Id.* at 5–6.

After the Final Office Action mailed and before Appellant’s briefs were filed and the Examiner’s Answer mailed, the U.S. Patent and Trademark Office (the “USPTO”) published revised guidance for use by USPTO personnel in evaluating subject matter eligibility under 35 U.S.C. § 101. 2019 REVISED PATENT SUBJECT MATTER ELIGIBILITY GUIDANCE, 84 Fed. Reg. 50, 57 (Jan. 7, 2019) (the “Revised Guidance”). That guidance revised the USPTO’s examination procedure with respect to the first step of the *Mayo/Alice* framework by (1) “[p]roviding groupings of subject matter that [are] considered an abstract idea”; and (2) clarifying that a claim is not “directed to” a judicial exception if the judicial exception is integrated into a practical application of that exception. *Id.* at 50. The Revised Guidance, by its terms, applies to all applications, and to all patents resulting from applications, filed before, on, or after January 7, 2019. *Id.*²

In the Answer, the Examiner elaborated upon the rejection under 35 U.S.C. § 101 in light of the Revised Guidance. Specifically, the Examiner determined that the claims are “aimed at a loyalty program determination and application,” which is a commercial interaction including “advertising, marketing or sales activities or behaviors” and falls into the grouping of certain methods of organizing human activity and, thus, is an abstract idea.

² The USPTO issued an update on October 17, 2019 (the “October 2019 Update: Subject Matter Eligibility,” available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf) (the “October 2019 Update”) clarifying the Revised Guidance in response to public comments.

Ans. 3; *see also* Revised Guidance, 84 Fed. Reg. at 52. The Examiner further determined that the additional elements do not integrate the abstract idea into a practical application. Ans. 3–4.

Step One of the Mayo/Alice Framework (Revised Guidance, Step 2A, Prong 1)

The first step in the *Mayo/Alice* framework, as mentioned above, is to determine whether the claims at issue are “directed to” a patent-ineligible concept, e.g., an abstract idea. *Alice Corp.*, 573 U.S. at 217. This first step, as set forth in the Revised Guidance (i.e., Step 2A), is a two-prong test; in Step 2A, Prong One, we look to whether the claim recites a judicial exception, e.g., one of the following three groupings of abstract ideas: (1) mathematical concepts; (2) certain methods of organizing human activity, e.g., fundamental economic principles or practices, commercial or legal interactions; and (3) mental processes. Revised Guidance, 84 Fed. Reg. at 54. If so, we next consider whether the claim includes additional elements, beyond the judicial exception, that “integrate the [judicial] exception into a practical application,” i.e., that 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 (“Step 2A, Prong Two”). *Id.* at 54–55. Only if the claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application do we conclude that the claim is “directed to” the judicial exception, e.g., an abstract idea. *Id.*

We also are not persuaded by Appellant’s argument that the Examiner does not identify an abstract idea or that the Examiner otherwise erred in determining that claim 1 is directed to an abstract idea. Appeal Br. 13–17;

see also Reply Br. 2–3. The Federal Circuit has explained that “the ‘directed to’ inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether ‘their character as a whole is directed to excluded subject matter.’” *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. Here, it is clear from the Specification (including the claim language) that claim 1 focuses on an abstract idea, and not on any improvement to technology and/or a technical field.

The Specification is titled “SYSTEMS AND METHODS TO PROVIDE LOYALTY PROGRAMS,” and states that the “present disclosure relate[s] to the processing of transaction data, such as records of payments made via credit cards, debit cards, prepaid cards, etc., and/or providing information based on the processing of the transaction data.” Spec. ¶ 2. In the Background section, the Specification describes, “[m]illions of transactions occur daily through the use of payment cards, such as credit cards, debit cards, prepaid cards, etc.” *Id.* ¶ 3. “Corresponding records of the transactions are recorded in databases for settlement and financial recordkeeping (e.g., to meet the requirements of government regulations).” *Id.* Such data can be “mined and analyzed for trends, statistics, and other analyses” and “for specific advertising goals, such as to provide targeted offers to account holders.” *Id.* The Specification identifies and incorporates numerous patents and patent applications related generally to commercial interactions, such as advertising and marketing,

including targeted offers, advertising, and loyalty programs, analyzing purchase behavior, evaluating advertising and marketing using transaction data, facilitating transactions with real time award determinations, analyzing transactional data, predicting future transactions and predictive modeling, mobile coupons, rewards, redeeming offers, and identifying a consumer account based on user data, among others. *See, e.g., id.* ¶¶ 4–11, 48, 58, 60–62, 71–73, 103, 117, 121, 123–26, 132, 135, 217–25, 243, 267, 280, 283, 294, 362, 400, 401.

The Specification describes various arrangements for tracking user behavior, analyzing the data to manage advertisement campaigns, and analyzing response profitability. *See, e.g., id.* ¶¶ 45, 63–362. In the section of the Specification entitled “LOYALTY PROGRAM,” the Specification describes a transaction handler as hosting loyalty programs on behalf of various entities, such as merchants, retailers, service providers, and issuers. *Id.* ¶ 138; *see also id.* ¶ 30. Hosted loyalty programs include “ongoing programs that accumulate benefits for customers (e.g., points, miles, cash back), and/or programs that provide one time benefits or limited time benefits (e.g., rewards, discounts, incentives).” *Id.* ¶ 152; *see also id.* ¶¶ 156 (describing benefits of award programs as “discounts, rewards, incentives, cash back, gifts, coupons, and/or privileges”), 159 (describing that members of a loyalty program may have member privileges, such as access services, products, opportunities, facilities, discounts, and permissions that are reserved for members), 162.

The system includes a transaction handler coupled to a centralized data warehouse, which stores transaction data (i.e., data related to financial transactions via financial transaction cards that are processed by the

transaction handler) and account data (i.e., data about the account holders involved in the transactions). *See id.* ¶¶ 35, 41, 42, Figs. 9–10. Account data for providing loyalty programs includes a user’s account identifier and information about the loyalty program, such as a set of loyalty program rules specifying conditions based on transaction data and transaction profiles, a loyalty benefit offeror linked with the set of loyalty rules, and a loyalty record for the loyalty program activities associated with the account identifier. *Id.* ¶¶ 153, 186, Fig. 8.

The centralized data warehouse associates an account identifier of the user, such as an account number of a financial payment card, with a loyalty program, indicating the user’s membership in the loyalty program. *Id.* ¶¶ 139, 159. Because the account number of a financial transaction card is associated with a loyalty program in the data warehouse, the transaction handler can use the financial payment card as a loyalty card when processing a payment transaction involving the card. *Id.* ¶ 145; *see also id.* ¶ 30. Thus, the transaction handler can accumulate reward points for a user for transactions that satisfy the loyalty program rules, which then are stored in the loyalty record, as well as redeem those reward points during a transaction. *Id.* ¶ 162; *see also id.* ¶ 180 (“[W]hen the user (101) is making a payment for a purchase from a merchant, a reward offer can be provided to the user (101) based on loyalty program rules (185) and the loyalty record (187) associated with the account identifier (181) of the user (101)[.]”).

According to the Specification, hosting the loyalty programs by the transaction handler benefits both consumers and merchants. Namely, “consumers do not have to carry multiple, separate loyalty cards (e.g., one for each merchant that offers a loyalty program); and merchants do not have

to incur a large setup and investment fee to establish the loyalty program.” *Id.* ¶ 146; *see also id.* ¶ 148 (describing that a transaction handler hosting loyalty programs “allow[s] the consumers to carry fewer [loyalty] cards”). The arrangement also allows “flexible awards” and “new offerings, such as merchant cross-offerings or bundling of loyalty offerings” (*id.* ¶ 147) and “may provide more data to the merchants than traditional loyalty programs” (*id.* ¶ 148). The invention seeks to enable third parties to “drive [consumer] behavior changes [through deliverance of the awards or incentives of the hosted loyalty program] without the hassle of loyalty card creation.” *Id.* ¶ 147. Because the arrangement allows a reward offer to be provided to the user when the user is making a payment for a purchase from a merchant, the Specification describes that “the user effort for redeeming the reward points can be reduced; and the user experience can be improved”. *Id.* ¶ 180.

Consistent with this disclosure, claim 1 recites a computer-implemented method comprising: (b) “receiving . . . from an acquirer . . . controlling a merchant account of the merchant, an authorization request for a payment from an issuer . . . to the acquirer . . . , wherein the issuer . . . controls a consumer account identified by the account identifier”; (c)

processing . . . the authorization request for the payment from the issuer . . . to the acquirer . . . , including propagating the authorization request to the issuer . . . to generate an authorization response for the payment from the issuer . . . to the acquirer . . . , the issuer . . . to make the payment on behalf of a customer, and the acquirer . . . to receive the payment on behalf of a merchant;

(d)

during the processing of the authorization request for the payment . . . , determining, . . . from the authorization request, the account identifier issued by an issuer, and determining . . . that the account identifier is associated with the loyalty program

of the merchant based on . . . storing the account identifier in association with a loyalty program of a merchant;

and (e)

in response to a determination that the account identifier is associated with the loyalty program, providing . . . in the authorization response transmitted to the acquirer . . . for the payment from the issuer . . . to the acquirer . . . requested in the authorization request, an indicator identifying that a user of the account identifier is enrolled in the loyalty program of the merchant.

These limitations, when given their broadest reasonable interpretation, recite steps during payment processing for determining whether a user's account identifier is associated with a loyalty program of the merchant, and providing an indicator identifying that the user is enrolled in the loyalty program.³ Simply put, claim 1 recites a commercial interaction, i.e., marketing or sales activities, which is a certain method of organizing human activity and, therefore, an abstract idea. *See Revised Guidance*, 84 Fed. Reg. at 52. *See also Loyalty Conversion Sys. Corp. v. Am. Airlines, Inc.*, 66 F. Supp. 3d 829, 835 (E.D. Tex. 2014) (Bryson, J.) (holding that claims directed to “converting one vendor’s loyalty award credits into loyalty award credits of another vendor” were not fundamentally different from the financial transactions at issue in *Bilski* and *Alice*); *Kroy IP Holdings, LLC v. Safeway, Inc.*, 107 F. Supp. 3d 677, 681, 691 (E.D. Tex. 2015) (Bryson, J.),

³ Although our articulation of the abstract idea may differ from the Examiner's, that difference merely relates to the level of abstraction, and does not impact the patent-eligibility analysis. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016) (“An abstract idea can generally be described at different levels of abstraction.”).

aff'd, 639 F. App'x 637 (Fed. Cir. 2016) (holding that claims directed to “conducting in[c]entive programs and fulfilling the awards in those programs,” were “indistinguishable in principle from the kinds of financial or business operations that were at issue in *Bilski* and *Alice*”).

Step One of the Mayo/Alice Framework (Revised Guidance, Step 2A, Prong 2)

Having concluded that claim 1 recites a judicial exception, i.e., an abstract idea (Step 2A, Prong One), we next consider whether the claim recites additional elements that integrate the judicial exception into a practical application (Step 2A, Prong Two).

Claim 1 additionally recites “a computing apparatus,” “a transaction handler,” “an electronic payment processing network,” “acquirer processors,” “issuer processors,” and a “data warehouse.” However, these additional limitations are recited and described at a high-level of generality. *See* Spec. ¶ 461 (providing that “the techniques are neither limited to any specific combination of hardware circuitry and software nor to any particular source for the instructions executed by the data processing system”); *see also id.*, e.g., ¶¶ 441–60, Figs. 1, 4. The additional elements do no more than generally link the use of the abstract idea to a particular technological environment (i.e., an electronic payment processing network having acquirer processors, issuer processors, a transaction handler) and/or field of use (i.e., field of electronic payments). *See* Revised Guidance, 84 Fed. Reg. at 55.

Appellant argues that claim 1 is not directed to an abstract idea, but instead “solves technological problems that arise in electronic payment networks.” Appeal Br. 14. Appellant contends that paragraph 180 of the Specification highlights problems addressed by the claimed invention. *Id.* at 15. Yet, paragraph 180 of the Specification describes that because a user

can be provided with a reward offer when making a payment for a purchase from a merchant based on loyalty program rules and a loyalty record associated with an account identifier of the user, “user effort for redeeming the reward points can be reduced; and the user experience can be improved.”

One difficulty with Appellant’s argument is that claim 1 does not recite providing a reward offer to a user when making a payment. Instead, claim 1, limitation (e), recites providing in an authorization response “an indicator identifying that a user of the account identifier is enrolled in the loyalty program of the merchant.” Because providing a reward offer is not recited in claim 1, it is not an additional element that integrates the abstract idea into a practical application. *See Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1149 (Fed. Cir. 2016) (“The § 101 inquiry must focus on the language of the Asserted Claims themselves.”); *Accenture Glob. Servs., GmbH v. Guidewire Software*, 728 F.3d 1336, 1345 (Fed. Cir. 2013) (“[T]he important inquiry for a § 101 analysis is to look to the claim.”).

Moreover, reducing user effort when redeeming reward points and improving a user experience may well provide a commercial advantage over prior art techniques. However, we are not persuaded that reducing user effort for redeeming reward points or improving user experience is a technological improvement, as opposed to an improvement in the commercial interaction (i.e., the abstract idea) itself.

Appellant argues that claim 1 allows a merchant system “to take further actions,” thereby improving loyalty program systems, because it provides an indicator in the authorization response (claim 1, limitation (e)). Appeal Br. 16. According to Appellant, this arrangement requires “fewer communications and computing resources” to “interact with the merchant

system.” *Id.* As an initial matter, claim 1 does not recite a merchant taking any further action in response to receiving an indicator in an authorization response.

Further, claim 1 recites result-based functional language “in general terms, without limiting [it] to technical means for performing the function[] that [is] arguably an advance.” *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1351 (Fed. Cir. 2016). For example, limitation (d) recites “determining” and limitation (e) recites “providing,” but any manner of “determining” and “providing” may be performed so long as the desired result is achieved (i.e., determining the account identifier from the authorization request; determining that the account identifier is associated with the loyalty program; providing an indicator in the authorization request). Put differently, claim 1 lacks the “specificity required to transform a claim from one claiming only a result to one claiming a way of achieving it.” *SAP Am. Inc. v. InvestPic, LLC*, 898 F.3d 1161 1167 (Fed. Cir. 2018); *see also Intellectual Ventures I*, 850 F.3d at 1342 (“[T]he claim language here provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it. Our law demands more.”).

Here, the improvement identified by Appellant may improve a merchant’s efficiency by collecting and analyzing information (i.e., the account identifier), and communicating the results of the collection and analysis via an indicator in the authorization response so that the merchant can take further action. Yet, a new arrangement of information in an authorization response (i.e., an indicator) assists a merchant — it does not improve technology, solve a technological problem, or improve the functionality of a computer. *See* Appeal Br. 16 (acknowledging that the

improvement is a “new arrangement of the claimed authorization response”); *see also Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1084, 1090 (Fed Cir. 2019) (“The claims . . . do not improve the functioning of the computer, make it operate more efficiently, or solve any technological problem. Instead, they recite a purportedly new arrangement of generic information that assists traders in processing information more quickly.”); *Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1378, 1384 (Fed. Cir. 2019) (“The claims are focused on providing information to traders in a way that helps them process information more quickly. . . , not on improving computers or technology. . . . Like *Electric Power [Grp., LLC v. Alstom S.A.]*, 830 F.3d 1350, 1354 (Fed. Cir. 2016)], the purported advance ‘is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions.’”).

Put another way, the limitation on which Appellant focuses is part of the abstract idea, not an additional element. *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“Adding one abstract idea (math) to another abstract idea (encoding and decoding) does not render the claim non-abstract.”).

To the extent that Appellant asserts that claim 1 is analogous to the claims at issue in *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288 (Fed. Cir. 2016), Appellant does not persuasively explain how claim 1 parallels the eligible claim in that case. *See* Appeal Br. 16–17. In *Amdocs*, the Federal Circuit determined that claim at issue “entail[ed] an unconventional technological solution (enhancing data in a distributed fashion) to a technological problem (massive record flows [that] previously

required massive databases).” *Amdocs*, 841 F.3d at 1300. Specifically, the court found that “the claim’s enhancing limitation necessarily requires that these generic components operate in an unconventional manner to achieve an improvement in computer functionality.” *Id.* at 1300–01. Here, we are not persuaded that claim 1 solves a technological problem analogous to solving for massive record flows that required massive databases. Nor are we persuaded that claim 1 involves generic components operating in an unconventional fashion to achieve an improvement in computer functionality.

Appellant’s argument regarding preemption also does not persuade us of Examiner. Appeal Br. 19–21. Although the Supreme Court has described “the concern that drives [the exclusion of abstract ideas from patent-eligible subject matter] as one of pre-emption,” *Alice Corp.*, 573 U.S. at 216, characterizing preemption as a driving concern for patent eligibility is not the same as characterizing preemption as the sole test for patent eligibility. “The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability” and “[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice Corp.*, 573 U.S. at 216). “[P]reemption may signal patent ineligible subject matter, [but] the absence of complete preemption does not demonstrate patent eligibility.” *Id.*

There is no indication of record that the operations recited in Appellant’s claim 1 require any specialized computer hardware or other inventive computer components, invoke any assertedly inventive programming, or that the claimed invention is implemented using other than

generic computer components as tools operating in their normal, routine, and ordinary capacity. *See SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1170 (Fed. Cir. 2018) (“[P]atent law does not protect such claims[, i.e., claims to an asserted advance in the realm of abstract ideas], without more, no matter how groundbreaking the advance.”).

We conclude, for the reasons outlined above, that claim 1 recites a method of organizing human activity, i.e., an abstract idea, and that the additional elements recited in the claim are no more than generic computer components used as tools to perform the recited abstract idea. As such, they do not integrate the abstract idea into a practical application. *See Alice Corp.*, 573 U.S. at 223–24 (“[W]holly 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.’” (quoting *Mayo*, 566 U.S. at 77)). Accordingly, we agree with the Examiner that claim 1 is directed to an abstract idea.

Step Two of the Mayo/Alice Framework (Revised Guidance, Step 2B)

Having determined under step one of the *Mayo/Alice* framework that claim 1 is directed to an abstract idea, we next consider under Step 2B of the Revised Guidance, the second step of the *Mayo/Alice* framework, whether claim 1 includes additional elements or a combination of elements that provides an “inventive concept,” i.e., whether the additional elements amount to “significantly more” than the judicial exception itself. Revised Guidance, 84 Fed. Reg. at 56.

Appellant argues that claim 1 is patent eligible because limitation (e), as recited in claim 1, is not well-understood or conventional. Appeal Br. 19.

In particular, Appellant contends that the Examiner “fail[s] to contend that this [limitation] is conventional” and does not rely on the features being conventional. Appeal Br. 19 (“[T]he rationale that the features of the claims are conventional is not relied upon in rejecting the claims under 35 U.S.C. § 101.”); *see also* Reply Br. 3 (“[I]t has never been shown how or why it is conventional to provide an indicator in the authorization response to allow a merchant system, such as an inventory management system or a transaction terminal, to take further actions.”). Appellant additionally contends that the Examiner does not consider limitations (d) and (e) as a combination to be conventional. Appeal Br. 19; Reply Br. 3.

Appellant’s argument is not persuasive at least because “the relevant inquiry [under step two of the *Mayo/Alice* framework (i.e., Step 2B of the Revised Guidance)] is not whether the claimed invention as a whole is unconventional or non-routine.” *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018). Instead, the question is whether the claim includes additional elements, i.e., elements other than the abstract idea itself, that “‘transform the nature of the claim’ into a patent-eligible application.” *Alice Corp.*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 78). *See also Mayo*, 566 U.S. at 72–73 (requiring that “a process that focuses upon the use of a natural law also contain *other* elements or a combination of elements, sometimes referred to as an ‘inventive concept,’ sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law itself” (emphasis added)).

Here, limitation (e) considered alone and in combination with limitation (d), does not provide an inventive concept, at least because limitations (d) and (e) are part of the abstract idea and not additional

elements. *See BSG Tech LLC*, 899 F.3d at 1290 (“It has been clear since *Alice* that a claimed invention’s use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention ‘significantly more’ than that ineligible concept.”) Appellant does not argue that any non-abstract features of the claimed invention are not well-understood, routine, and conventional and, as such, we are not persuaded of Examiner error. *See id.* at 1291 (“BSG Tech does not argue that other, non-abstract features of the claimed inventions, alone or in combination, are not well-understood, routine and conventional database structures and activities. Accordingly, the district court did not err in determining that the asserted claims lack an inventive concept.”).

Appellant further argues that the prior art rejection involving multiple prior art references shows that the combination of limitations (d) and (e) are not conventional. Appeal Br. 20 (“The fact that the Office Action needs to piece together multiple prior art references for the prior art rejections . . . further evidences that the combination of these claim limitations cannot possibly be conventional”). Yet, neither a finding of novelty nor a non-obviousness determination automatically leads to the conclusion that the claimed subject matter is patent eligible. Although the second step in the *Mayo/Alice* framework is termed a search for an “inventive concept,” the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for “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.*, 573 U.S. at 217–18 (citation omitted). A novel and non-obvious claim directed to a purely abstract idea is, nonetheless, patent ineligible. *See Mayo*, 566 U.S. at 90.

For these reasons, we are not persuaded that claim 1 recites additional elements that, either individually or as an ordered combination, amount to significantly more than the judicial exception within the meaning of the Revised Guidance. Revised Guidance, 84 Fed. Reg. at 52–55.

We are not persuaded, on the present record, that the Examiner erred in rejecting independent claim 1 under 35 U.S.C. § 101. Therefore, we sustain the Examiner’s rejection of claim 1, and claims 10 and 18, which fall with claim 1.

We also decline to find error here to the extent Appellant argues that the § 101 rejection cannot be sustained because the Examiner has not addressed the patent eligibility of each of the claims separately or otherwise failed to establish a prima facie case of patent ineligibility. Appeal Br. 21. Although Examiners are to evaluate the patent eligibility of each claim individually, the Examiner need not provide a separate written analysis for each individual claim when the claims are directed to the same abstract idea. *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1348 (Fed. Cir. 2014) (explaining that when all claims are directed to the same abstract idea, “addressing each claim of the asserted patents [is] unnecessary.”).

Here, the Examiner found that the dependent claims are directed to the same abstract concept as the independent claims. *See* Final Act. 5–6. The Examiner further determined that the additional descriptive limitations recited in the dependent claims do amount to significantly more than the abstract idea. *See id.*; *see also* Ans. 3–4. Appellant does not persuasively show that the Examiner erred in this determination. Therefore, we sustain the Examiner’s rejection of dependent claims 2–9, 11–17, and 19–21 under

35 U.S.C. § 101.

Obviousness

We are persuaded by Appellant’s argument that the Examiner erred in rejecting independent claims 1, 10, and 18 under 35 U.S.C. § 103(a), because Fordyce does not teach or suggest

in response to a determination that the account identifier is associated with the loyalty program, providing, by the transaction handler of the computing apparatus in the authorization response transmitted to the acquirer processor for the payment from the issuer processor to the acquirer processor requested in the authorization request, an indicator identifying that a user of the account identifier is enrolled in the loyalty program of the merchant[.]

as recited in limitation (e) of claim 1, and similarly recited in claims 10 and 18. Appeal Br. 21–27; *see also* Reply Br. 3–6. The Examiner finds that Fordyce discloses the argued limitation. *See* Final Act. 11–15 (citing Fordyce ¶¶ 28, 184, 219, 222, 223, 225–29, 232, 237, 242–45, 251, 262); *see also* Ans. 5–12 (citing Fordyce ¶¶ 26, 28, 173, 174, 183, 184, 207, 211, 222, 224, 225, 226, 229, 234, 241, 251, 262; Figs. 1, 5, 9, 10).

We have reviewed the portions of Fordyce relied on by the Examiner for the argued limitation. Yet, we do not find, and the Examiner does not clearly identify, an indicator that “identif[ies] that a user of the account identifier is enrolled in the loyalty program of the merchant” and is provided “in the authorization response” and “in response to a determination [based on the authorization request]” that the account identifier “identif[ies] that a user of the account identifier is enrolled in the loyalty program of the merchant” is associated with the loyalty program,” as required by the claim 1, and similarly required by claims 10 and 18.

For example, Fordyce teaches that a merchant uses a point of service terminal to obtain an account number from portable consumer device 502. Fordyce ¶ 225. The POS terminal sends a transaction authorization request to issuer 104 of portable consumer device 502. *Id.* Issuer 104 authorizes the transaction using transaction handler 106. *Id.* ¶ 226. Authorization includes applying business rules. *Id.* Thus, these portions disclose a transaction handler authorizing a transaction according to business rules in response to an authorization request. However, the portions do not disclose or suggest that the authorization response includes an indicator identifying that a user of the account is enrolled in a loyalty program of the merchant, much less that such indicator is provided in response to a determination that the account identifier [determined from the authorization request] is enrolled in the loyalty program of the merchant, as recited in claim 1 and similarly recited in claims 10 and 18.

As another example, with reference to Figure 6, Fordyce discloses receiving data characterizing a transaction between a consumer and a merchant (step 602), and determining whether a transaction is eligible for the loyalty program using a global unique identifier (“GUID”) matching algorithm (step 606). The data characterizing the transaction can include an account GUID, such as a customer’s account used in the transaction, a GUID for the merchant, and a GUID for the commodity. Fordyce ¶ 234; *see also id.* ¶ 232. The determination eligibility entails matching the account GUID and the merchant GUID against a plurality of account GUIDs and merchant GUIDs in a loyalty program database. *Id.* ¶ 241. When a match exists, a loyalty program that the merchant or account participates in is determined. *Id.* An incentive is derived for the transaction according to the

loyalty program (step 608), and information regarding the incentive is transmitted to the merchant, loyalty program implementer, third party agency, or consumer. *Id.* ¶ 244, 247–48. Yet, while the cited portions describe determining whether a customer is a member of a loyalty program and whether the transaction qualifies for the loyalty program, they do not disclose an indicator provided by the transaction handler in an authorization response that is transmitted to the acquirer processor requested in the authorization request and in response to a determination that the account identifier, determined from the authorization request, is associated with the loyalty program.

As yet another example, paragraph 251 of Fordyce describes that a merchant receives at a point of a service a transmission indicating that the consumer is a member of the merchant’s loyalty program. The merchant conveys to the consumer an offer related to the transaction in response. Fordyce ¶ 251. Yet, this portion of Fordyce does not describe that the indication that the customer is a member of the loyalty program is transmitted in an authorization response, nor that it is provided in response to a determination that an account identifier (determined from the authorization request) is associated with the loyalty program.

Therefore, we reverse the rejection under § 103(a) of independent claims 1, 10, and 18, and their dependent claims.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	References/Basis	Affirmed	Reversed
1-21	101	Eligibility	1-21	
1-21	103(a)	Etheredge, Fordyce		1-21
Overall Outcome			1-21	

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, the Examiner's decision is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

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) (2018).

AFFIRMED