



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.
12/896,632	10/01/2010	Edward W. Fordyce III	8223-1706151	1185
144885	7590	09/29/2020	EXAMINER	
The Webb Law Firm / Visa International ONE GATEWAY CENTER 420 FT. DUQUESNE BLVD, SUITE 1200 PITTSBURGH, PA 15222			DURAN, ARTHUR D	
			ART UNIT	PAPER NUMBER
			3622	
			NOTIFICATION DATE	DELIVERY MODE
			09/29/2020	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 EDWARD W. FORDYCE III, LEIGH AMARO,
MICHELLE ENG WINTERS, ALFRED WILLIAM GRIGGS,
LAURA DIGIOACCHINO, DIANE C. SALMON, KEVIN PAUL SIEGEL,
KAUSHIK SUBRAMANIAN, and JAMES ALAN VONDERHEIDE

Appeal 2018-009111¹
Application 12/896,632²
Technology Center 3600

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

HUTCHINGS, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ Our Decision references Appellant's Specification ("Spec.," filed Oct. 1, 2010), Appeal Brief ("Appeal Br.," filed June 20, 2018), Reply Brief ("Reply Br.," filed Sept. 26, 2018), the Examiner's Answer ("Ans.," mailed July 27, 2018), and Non-Final Office Action ("Non-Final Act.," mailed Jan. 22, 2018).

² We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant indicates that the real party in interest is "Visa U.S.A. Inc." Appeal Br. 3.

STATEMENT OF THE CASE

Appellant³ appeals under 35 U.S.C. § 134(a) from the Examiner’s rejection of claims 1, 3–14, 16, 17, and 19. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE and ENTER A NEW GROUND OF REJECTION pursuant to our authority under 37 C.F.R. § 41.50(b).

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, 16, and 17 are the independent claims on appeal. Claim 16, reproduced below with bracketed notations added, is illustrative of the claimed subject matter:

16. A non-transitory computer storage medium storing instructions which, when executed on a computer system, cause the computer system to perform a method, the method comprising:

[(a)] receiving, in a computing apparatus coupled to a transaction handler of an electronic payment processing network, an authorization request from a transaction terminal via an acquirer processor of the electronic payment processing

³ 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 Oct. 1, 2010), Appeal Brief (“Appeal Br.,” filed June 20, 2018), Reply Brief (“Reply Br.,” filed Sept. 26, 2018), the Examiner’s Answer (“Ans.,” mailed July 27, 2018), and Non-Final Office Action (“Non-Final Act.,” mailed Jan. 22, 2018). Appellant identifies Visa U.S.A. as the real party in interest. Appeal Br. 3.

network, the authorization request identifying payment information including:

[(1)] an account identifier of a customer issued by an issuer,

[(2)] an amount of a payment to be authorized using the account identifier, and

[(3)] an identification of a merchant account to receive the payment, wherein:

[(4)] the authorization request is processed by the transaction handler for authorization of the payment from an issuer processor to the acquirer processor,

[(5)] the issuer processor is to make the payment on behalf of the customer from a consumer account identified by the account identifier, and

[(6)] the acquirer processor is to receive the payment on behalf of a merchant in the merchant account,

[7] wherein the computing apparatus includes:

[(i)] the transaction handler;

[(ii)] a data warehouse coupled with the transaction handler to store transaction data recording payment transactions processed by the transaction handler; and

[(iii)] a portal coupled to the transaction handler and configured to communicate with transaction terminals using a communication channel that is outside of the electronic payment processing network;

[(b)] during the transaction handler processing the authorization request for the payment and prior to the transaction handler providing an authorization response for the authorization request,

[(1)] determining, by the computing apparatus, whether the account identifier is associated with a loyalty program;

[(2)] in response to a determination that the account identifier is associated with the loyalty program,

[(i)] embedding, by the transaction handler, a request for purchase details of the payment in the authorization response to the authorization request,

[(ii)] transmitting, by the transaction handler via the electronic payment processing network, the authorization response to the transaction terminal,

[(iii)] wherein the request for purchase details embedded in the authorization response causes the transaction terminal to use the communication channel outside of the electronic payment processing network to transmit the purchase details of the payment to the portal;

[(c)] receiving, in the portal via the communication channel that is outside of the electronic payment processing network, the purchase details of the payment authorized via the authorization request, wherein the purchase details provide information in addition to the payment information identified in the authorization request; and

[(d)] determining, by the computing apparatus, benefits to be awarded to the customer according to the loyalty program based on the purchase details received in the portal via the communication channel that is outside of the electronic payment processing network.

REJECTION

Claims 1, 3–14, 16, 17, and 19 are rejected under 35 U.S.C.

§ 103 as unpatentable over Fordyce (US 2008/0059306 A1, pub. Mar. 6, 2008) and Degliantoni (US 2008/0217397 A1, pub. Sept. 11, 2008).

ANALYSIS

Obviousness

We are persuaded by Appellant’s argument that the Examiner erred in rejecting independent claims 1, 16, and 17 under 35 U.S.C. § 103, because Fordyce and Degliantoni do not teach or suggest “embedding, by the

transaction handler, a request for purchase details of the payment in the authorization response to the authorization request,” as recited in claim 16, limitation (b)(2)(i), and similarly recited in claims 1 and 17. Appeal Br. 13–19; *see also* Reply Br. 2–4. The Examiner finds that Fordyce teaches embedding a request for purchase details of the payment. Non-Final Act. 9 (citing Fordyce ¶¶ 229, 232, 234, 261). The Examiner acknowledges that Fordyce does not teach that the embedded request for purchase details is in the authorization response to the authorization request. *Id.* And the Examiner relies on Degliantoni for this aspect of the claim language. *Id.* at 9–10 (citing Degliantoni, ¶¶ 38, 39, 42, 49, 58).

As an initial matter, we disagree with the Examiner’s finding that the cited portions of Fordyce teach embedding a request for purchase details. Paragraph 229 describes exemplary global unique identifiers (“GUIDs”) for merchants participating in a loyalty program. Paragraph 232 identifies exemplary transaction data used to determine whether a transaction qualifies for an incentive of the loyalty program. Paragraph 234 describes exemplary data characterizing the transaction. Paragraph 261 identifies exemplary portable devices and provides that each portable consumer device can include “a loyalty module with a computer chip with dedicated hardware, software, [or] embedded software.”

The Examiner explains that paragraphs 229, 232, and 234 of Fordyce provide a “request for purchase details for the loyalty/awards program [that] is [sic] more details than a mere payment authorization.” Non-Final Act. 9. The Examiner further finds that paragraph 261 “discloses using embedding.” *Id.* And the Examiner reasons that the claimed term “embedding has few details and is open to a broad interpretation.” *Id.*

Yet, while paragraphs 229, 232, and 234 of Fordyce describe that using transaction data to determine whether a transaction qualifies for the incentive of the loyalty program, the paragraphs do not disclose the claimed “request for purchase transaction data,” as recited in claim 16, limitation (b)(2)(i), and similarly recited in claims 1 and 17, much less embedding the request. Fordyce’s description at paragraph 261 of a portable consumer portable consumer device having a loyalty module with embedded software does not remedy this deficiency.

We also disagree with the Examiner’s finding that Degliantoni teaches embedding the request for purchase details in the authorization response to the authorization request. Degliantoni teaches that an acquirer (i.e., a merchant bank) receives credit card transaction data from a merchant’s point-of-sale device and determines whether the transaction is eligible for an award. Degliantoni ¶¶ 38, 42. The acquirer determines whether the transaction is eligible for an award. *Id.* If so, the acquirer encodes promotion data within the payment authorization request for transmission to the issuer. *Id.* The promotion data embedded in the payment authorization request includes the amount of the award. *Id.* ¶ 42. If the issuer approves the transaction, then the issuer could include encode additional award-related information into the payment authorization response, such as a reduction in the purchase amount, for transmission to the acquirer. *Id.* ¶¶ 43–44. The acquirer sends the payment authorization response, which includes the promotion data, to the merchant. *Id.* ¶ 45. In another embodiment, the issuer, rather than the acquirer, determines that a transaction is eligible for an award and encodes promotion data within the

payment authorization response to the acquirer. *Id.* ¶ 49. The promotion data reflects the amount of award. *Id.* ¶ 58.

Thus, in each embodiment Degliantoni teaches encoding promotion data, such as an amount of an award, not a request for purchase details of the payment. The Examiner does not establish that a combination of Fordyce and Degliantoni teaches or suggests “embedding, by the transaction handler, a request for purchase details of the payment in the authorization response to the authorization request,” as recited in claim 16, and similarly recited in claims 1 and 17. Therefore, we reverse the rejection under § 103 of independent claims 1, 16, and 17, and their dependent claims.

NEW GROUND OF REJECTION
Patent-Ineligible Subject Matter

Pursuant to our discretionary authority under 37 C.F.R. § 41.50(b), we newly reject claims 1, 3–14, 16, 17, and 19 under 35 U.S.C. § 101 for being directed to a judicial exception to patent-eligible subject matter without reciting significantly more. We select claim 16 as representative.

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).

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 2019 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.*⁴

⁴ The USPTO issued an update on October 17, 2019 (the “October 2019 Update: Subject Matter Eligibility,” available at <https://www.uspto.gov/sites/>

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

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 2019 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. 2019 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.*

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

default/files/documents/peg_oct_2019_update.pdf) (the “October 2019 Update”) clarifying the Revised Guidance in response to public comments.

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 16 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 (describing that benefits include reward points, cash back, and levels of discounts).

The system includes, in part, a centralized data warehouse coupled to the transaction handler and a portal. *See id.* ¶¶ 38, 183, Figs. 4, 10. The transaction handler generates transaction data from processing the user’s financial transactions made by financial transaction cards, such as credit cards. *Id.* ¶¶ 35, 42. The data warehouse stores the transaction data, account data (i.e., data about the account holders involved in the transactions), and other data. *See id.* ¶¶ 38, 41, Figs. 9–10. The portal provides data or

information derived from the transaction data in response to a query request from a third party or as an alert or notification message. *Id.* ¶ 38.

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 financial payment card serves as a loyalty card when processing a payment transaction involving the card. *Id.* ¶ 145; *see also id.* ¶ 30.

Thus, the transaction handler can update the loyalty record associated with the account identifier when events satisfy the program rules. *Id.* ¶ 162. The accumulated benefits can be redeemed to offset or reduce a purchase price when the user is performing a payment transaction that satisfies loyalty program rules. *Id.* ¶ 163; *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.

In operation, a transaction handler receives an authorization request identifying payment information from an acquirer processor of a merchant for an electronic payment. *Id.* ¶ 192. The transaction handler searches the data warehouse to determine whether the account identifier contained in the authorization request is associated with a loyalty program. *Id.* ¶¶ 192–93. If so, the transaction handler or the portal requests purchase details. *Id.* ¶ 193. For example, the transaction handler embeds a request for purchase details in the authorization response. *Id.* ¶ 194, Fig. 9. No particular manner for embedding is described. *See id.*

In one embodiment, in response to the received request for purchase details embedded in the authorization response, the transaction terminal of

the merchant provides purchase details in the authorization response sent to the transaction handler. *Id.* ¶ 262; *see also id.* ¶¶ 195–96 (describing that the merchant saves purchase details in a file with purchase details of transactions and the merchant’s transaction terminal sends purchase details to the transaction handler through an acquirer processor in control of the merchant account), Fig. 10. In another embodiment, the merchant instead sends purchase details to the transaction handler via a portal of the transaction handler. *Id.* ¶ 263, Fig. 9. For example, the merchant saves purchase details in a file and submits the purchase details to the portal at the time of settlement. *Id.* ¶ 196. Providing the purchase details via the portal “avoid[s] slowing down the transaction handler (103).” *Id.* ¶ 197. The purchase details identify items purchased and their prices, and are used to determine the benefits to award to the account identifier. *Id.* ¶ 198.

For example, the transaction handler (or issuer processor) processes the payment transaction, identifies offers that are qualified for redemption in light of the purchase details, and provides the benefit of the qualified offers to the user. *Id.* ¶ 247. In this way, “the benefit of the offer is fulfilled via the transaction handler (103) (or the issuer processor (145)) without the user (101) having to do anything special at and/or after the time of checkout, other than paying with the consumer account (146) of the user (101) . . . that is enrolled in the program for the automation of offer redemption.” *Id.* ¶ 248. The benefit may be applied with statement credits. *Id.* ¶¶ 199, 247.

Consistent with this disclosure, claim 16 recites a non-transitory computer storage medium storing instructions which, when executed on a computer system, cause the computer system to perform a method comprising: (a) “receiving . . . an authorization request . . . , the authorization

request identifying payment information including:” (1) “an account identifier of a customer issued by an issuer,” (2) “an amount of a payment to be authorized using the account identifier,” and (3) “an identification of a merchant account to receive the payment . . .”; (b) “during the . . . processing [of] the authorization request for the payment and prior to . . . providing an authorization response for the authorization request”: (1) “determining . . . whether the account identifier is associated with a loyalty program”; and (2) “in response to a determination that the account identifier is associated with the loyalty program”: (i) “embedding . . . a request for purchase details of the payment in the authorization response to the authorization request,” and (ii) “transmitting . . . the authorization response . . .”; (c) “receiving . . . the purchase details of the payment authorized via the authorization request, wherein the purchase details provide information in addition to the payment information identified in the authorization request”; and (d) “determining . . . benefits to be awarded to the customer according to the loyalty program based on the purchase details received . . .”.

These limitations, when given their broadest reasonable interpretation, recite steps performed during payment processing for determining whether a customer’s account identifier is associated with a loyalty program of the merchant, and, if so, determining benefits to be awarded to the customer according to the loyalty program based on purchase details of the payment transaction. Simply put, claim 1 recites a commercial interaction, i.e., marketing or sales activities, which is a 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.), *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*”).

Having concluded that claim 16 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).

Beyond the abstract idea, claim 16 additionally recites “a computing apparatus coupled to a transaction handler of an electronic payment processing network” (limitation (a)), that the authorization request is “from a transaction terminal via an acquirer processor of the electronic payment processing network” (limitation (a)), the authorization request “is processed by the transaction handler for authorization of the payment from an issuer processor to the acquirer processor” (limitation (a)(4)), “the issuer processor is to make the payment on behalf of the customer from a consumer account identified by the account identifier” (limitation (a)(5)), and “the acquirer processor is to receive the payment on behalf of a merchant in the merchant account” (limitation (a)(6)). Claim 16 also additionally recites that the claimed computing apparatus includes “the transaction handler” (limitation (a)(7)(i)), “a data warehouse coupled with the transaction handler to store transaction data recording payment transactions processed by the

transaction handler” (limitation (a)(7)(ii)), and “a portal coupled to the transaction handler and configured to communicate with transaction terminals using a communication channel that is outside of the electronic payment processing network” (limitation (a)(7)(iii)). Claim 16 also additionally recites that the “transaction handler” embeds the request for purchase details (limitation (b)(2)(i)) and transmits the authorization response “via the electronic payment processing network . . . to the transaction terminal” (limitation (b)(2)(ii)). The request for purchase details “causes the transaction terminal to use the communication channel outside of the electronic payment processing network to transmit the purchase details of the payment to the portal” (limitation (b)(2)(iii)). The purchase details are received “in the portal via the communication channel that is outside of the electronic payment processing network” (limitation (c)). And the benefits to be awarded to the customer are determined “by the computing apparatus” and based on the purchase details “receiving, in the portal via the communication channel that is outside of the electronic payment processing network” (limitation (d)).

These elements are recited at a high level of generality, i.e., as generic computer components performing generic computer functions, and generally link the use of the abstract idea to a particular technological environment (i.e., a computing apparatus coupled to a transaction handler of an electronic payment processing network, an issuer processor that makes a payment on behalf of a customer, an acquirer processor that receives payment on behalf of a merchant, a data warehouse coupled with the transaction handler, a portal coupled to the transaction handler and configured to communicate with transaction handlers using a communication channel that is outside of

the electronic payment processing network) or field of use (electronic payment processing). *See, e.g.*, Spec. ¶ 442 (describing that various modules or components, such as the transaction handler, transaction terminal, portal, issuer processor, acquirer processor, “can be implemented as a computer system” and the modules can “share hardware or be combined on a computer system”).

We find no indication in the Specification that the operations recited in claim 16 require any specialized computer hardware or other inventive computer components, i.e., a particular machine, invoke any allegedly inventive programming, 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.”). Like the claims at issue in *Electric Power*, the advance that the claimed invention purports to make is “a process of gathering and analyzing information of a specified content,” and “not any particular assertedly inventive technology for performing those functions.” *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (determining the claims to be directed to an abstract idea).

We also find no indication in the Specification that the claimed invention effects a transformation or reduction of a particular article to a different state or thing. Nor do we find anything of record that attributes an improvement in technology and/or a technical field to the claimed invention or that otherwise indicates that the additional elements, considered

individually and in combination, integrate the abstract idea into a “practical application,” as that phrase is used in the Revised Guidance.

Instead, Appellant’s invention focuses on improving user experience in a loyalty program by reducing user effort for redeeming reward points. Spec. ¶ 180; *see also id.* ¶¶ 146, 148. Reducing user effort in redeeming reward points is an improvement in the abstract idea of determining whether a customer’s account identifier is associated with a loyalty program of the merchant, and determining loyalty program benefits to be awarded based on purchase details of the payment transaction (i.e., an improved commercial interaction) — not an improvement to technology. *See Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1335 (Fed. Cir. 2015) (holding claims that improved an abstract idea but did not recite the supposed computer improvements were not patent eligible).

The additional elements considered alone and in combination support this determination. For example, claim 16 recites that the claimed computing apparatus includes a transaction handler, a data warehouse coupled to the transaction handler to store transaction data, and a portal coupled to the transaction handler and configured to communicate with transaction terminals (limitations (a)(7)(i)–(a)(7)(iii)). The authorization request includes an account identifier, and the computing apparatus determines during transaction handler processing of the authorization request whether the account identifier is associated with a loyalty program (limitation (b)(1)), embeds, by the transaction handler, a request for purchase details in the authorization response (limitation (b)(2)(i)), transmits the authorization response (limitation (b)(2)(ii)), receives, in the portal, the purchase details (limitation (c)), and determines benefits to be awarded to

the customer according to the loyalty program based on the purchase details (limitation (d)). Put simply, the claimed computing apparatus recites generic computer components to perform generic data processing functions, such as receiving data, analyzing data, manipulating data, and transmitting data, at a high level of generality. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (finding that “[t]he advance [the claims] purport to make 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. They are therefore directed to an abstract idea.”).

Here, the largely functional limitations set forth the abstract idea of determining whether a customer’s account identifier is associated with a loyalty program of the merchant, and, if so, determining benefits to be awarded to the customer according to the loyalty program based on purchase details of the payment transaction, and tie it to a particular technological environment. For example, the step of embedding a request for purchase details (limitation (b)(2)(i)) recites no particular manner by which the function is performed. All that is disclosed is the ultimate objective. As pointed out by the Federal Circuit in *Electric Power*, “the essentially result-focused, functional character of claim language has been a frequent feature of claims held ineligible under § 101, especially in the area of using generic computer and network technology to carry out economic transactions.” *Id.* at 1356; *see also Loyalty Conversion Sys. Corp. v. Am. Airlines, Inc.*, 66 F. Supp. 3d at 837–38 (finding that the asserted claims “are largely functional in nature and do little more than set forth the general concept of currency exchange, as applied to loyalty awards, and then announce the use

of ‘one or more’ computers to obtain various efficiencies in the process of converting one type of loyalty award credits into another”).

Claim 16 also additionally recites that the computing apparatus includes a “portal coupled to the transaction handler and configured to communicate with transaction terminals using a communication channel that is outside of the electronic payment processing network” (limitation (a)(7)(iii)). The portal receives purchase details “via the communication channel that is outside of the electronic payment processing network” (limitation (c)). And, the benefits to be awarded to the customer are determined based on the purchase details “received in the portal via the communication channel that is outside of the electronic payment processing network” (limitation (d)).

Yet, these limitations serve to generally link the use of the abstract idea to a particular technological environment having a portal and communication channel that is outside of the electronic payment processing network. *See Revised Guidance*, 84 Fed. Reg. at 55. For example, Appellant does not purport to have invented a specialized portal or distributed processing (e.g., sending first information of a first type to a first computer for processing and sending second information of a second type to a second computer for processing). *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d at 1355 (Fed. Cir. 2016) (“[M]erely selecting information, by content or source, for collection, analysis, and display does nothing significant to differentiate a process from ordinary mental processes, whose implicit exclusion from § 101 undergirds the information-based category of abstract ideas.”); *see buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (“That a computer receives and sends the information over

a network—with no further specification—is not even arguably inventive.”). Here, transmitting purchase details to a portal and receiving purchase details at a portal via a channel outside of the electronic payment processing network to determine benefits based on the purchase details improves the commercial interaction (i.e., abstract idea) itself. Specifically, by sending purchase details to the portal, the receipt and processing of the purchase details does not slow down the transaction handler during electronic payment processing.

We conclude, for the reasons outlined above, that claim 16 recites a commercial interaction, 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 that generally link the abstract idea to a particular technological environment. As such, they do not integrate the abstract idea into a practical application.

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

Having determined under step one of the *Mayo/Alice* framework that claim 16 is directed to an abstract idea, we next consider under Step 2B of the 2019 Revised Guidance, the second step of the *Mayo/Alice* framework, whether claim 16 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. In evaluating Step 2B, we consider whether the claim limitations involve more than the performance of well-understood, routine, and conventional activities previously known to the industry.

Berkheimer v. HP Inc., 881 F.3d 1360, 1367 (Fed. Cir. 2018); *see* Revised Guidance, 84 Fed. Reg. at 56.

Individually, the additional elements recited in claim 16, namely, the computing apparatus, transaction handler, data warehouse, portal, electronic payment processing network, transaction terminal, acquirer processor, issuer processor, and communication channel outside the electronic payment network are generic components that perform generic functions of receiving, analyzing, and transmitting data at a high level of generality. *See, e.g.*, Spec. 441–61; *see also buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.”).

As an ordered combination, these elements provide no more than when they are considered individually. *Alice*, 573 U.S. at 225. The additional elements are used as tools to implement the judicial exception. *See SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1169–70 (Fed. Cir. 2018) (claimed databases and processors did not improve computers but used available computers and functions as tools to execute the claimed process); *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*, 876 F.3d 1372, 1378 (Fed. Cir. 2017) (considering the steps of representative claims as an “ordered combination” reveals they “amount to ‘nothing significantly more’ than an instruction to apply [an] abstract idea” using generic computer technology).

Here, the additional elements in claim 16, understood in light of the Specification, require no more than conventional computer and network technology to perform generic computer functions, e.g., receiving, storing, and processing information, that are known in the art.

Accordingly, we determine that claim 16 lacks an inventive concept. Therefore, we reject claim 16 under 35 U.S.C. § 101.

The remaining claims are directed to the same abstract idea as claim 16, and also do not recite additional limitations, considered individually and as an ordered combination, that integrate the abstract idea into a practical application or provide an inventive concept. Therefore, these claims are rejected under § 101 for the same reasons described above with respect to claim 16. *See Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 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.”).

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	References/Basis	Affirmed	Reversed	New Ground
1, 3–14, 16, 17, 19	103	Fordyce, Degliantoni		1, 3–14, 16, 17, 19	
1, 3–14, 16, 17, 19	101	Eligibility			1, 3–14, 16, 17, 19
Overall Outcome				1, 3–14, 16, 17, 19	1, 3–14, 16, 17, 19

TIME PERIOD FOR RESPONSE

This Decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). Section 41.50(b) provides that “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

Section 41.50(b) also provides that Appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of

Appeal 2018-009111
Application 12/896,632

the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new Evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

Further guidance on responding to a new ground of rejection can be found in the Manual of Patent Examining Procedure § 1214.01.

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).

REVERSE
37 C.F.R. 41.50(b)