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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PEDRO J. CHAVARRIA and KRISTOFER PEREZ

Appeal 2019-001223
Application 14/554,713
Technology Center 3600

Before BRADLEY W. BAUMEISTER, JASON V. MORGAN, and
JEREMY J. CURCURI, *Administrative Patent Judges*.

BAUMEISTER, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner’s final rejection of claims 1–20, which constitute all of the pending claims.¹

Appeal Br. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Mastercard International Incorporated. Appeal Brief filed June 1, 2018 (“Appeal Br.”) at 1.

CLAIMED SUBJECT MATTER

Appellant describes the present invention as follows:

A computer-implemented method for recommending vacation options based on transaction data is implemented by a vacation recommendation computer device in communication with a memory. The method includes receiving a plurality of transaction data associated with a cardholder, processing the plurality of transaction data to determine a plurality of cardholder vacation characteristics, receiving a plurality of vacation options including at least one vacation attribute, identifying at least one vacation option responsive to the cardholder by comparing the plurality of cardholder vacation characteristics to the at least one vacation attribute, and recommending the at least one identified vacation option to the cardholder.

Abstract.

STATEMENT OF THE REJECTIONS

Claims 1–20 stand rejected under 35 U.S.C. § 101 as being directed to a judicial exception to patent-eligible subject matter (an abstract idea) without reciting significantly more. Final Act. 3–7.²

Claims 1, 3, 4, 8, 10, 11, 15, 17, and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Williams (US 2014/0279250 A1; published Sept. 18, 2014) and Winters (US 2011/0231257 A1; published Sept. 22, 2011). Final Act. 8–14.

² Rather than repeat the Examiner’s positions and Appellant’s arguments in their entirety, we refer to the above-mentioned Appeal Brief, as well as the following documents, for their respective details: the Final Action mailed October 24, 2017 (“Final Act.”); the Examiner’s Answer mailed September 21, 2018 (“Ans.”); and the Reply Brief filed November 21, 2018 (“Reply Br.”).

Claims 2, 9, and 16 stand rejected under 35 U.S.C. § 103 as being unpatentable over Williams, Winters, Gray (US 2015/0073841 A1; published Mar. 12, 2015), and Rugge (US 7,555,451 B2; issued June 30, 2009). Final Act. 16–18.

Claims 5, 6, 12, 13, 19, and 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Williams, Winters, and Fikes (US 2005/0071224 A1; published Mar. 31, 2005). Final Act. 14–16.

Claims 7 and 14 stand rejected under 35 U.S.C. § 103 as being unpatentable over Williams, Winters, and Goenka (US 2012/0059707 A1; published Mar. 8, 2012). Final Act. 18–19.³

STANDARD OF REVIEW

The Board conducts a limited *de novo* review of the appealed rejections for error based upon the issues identified by Appellant, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential).

THE SECTION 101 REJECTION

The Claimed Invention

Independent claim 1, which represents the appealed claims, is reproduced below.⁴ The claim has been reformatted and bracketed

³ The Examiner issued an additional indefiniteness rejection under § 112(b) in the Final Office Action. Final Act. 2–3. This rejection was withdrawn in the Examiner’s Answer. Ans. 3.

⁴ Appellant argues the section 101 rejection of all of the appealed claims together as a group. Appeal Br. 6–18. Accordingly, we select independent claim 1 as representative. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2017).

paragraph labels have been added for clarity. Also, the claim language that recites the abstract ideas has been emphasized:

1. *A computer-implemented method for recommending vacation options based on cardholder transaction data from a payment network, the method implemented by a vacation recommendation computer device in communication with a memory and the payment network, the method comprising:*

[(a)] receiving a plurality of cardholder transaction data associated with a particular cardholder;

[(b)] determining, from the received cardholder transaction data, a primary region associated with the particular cardholder;

[(c)] processing the received plurality of cardholder transaction data to

(i) distinguish vacation transaction data from ordinary transaction data based on at least one of a card-present transaction location outside of the primary region and a merchant category, included with each cardholder transaction data,

(ii) associate one or more merchant categories with a respective category of vacation travel,

(iii) determine that the particular cardholder has initiated a plurality of purchase transactions within at least one of the associated merchant categories,

(iv) determine a plurality of cardholder vacation characteristics from at least one of the vacation transaction data and the ordinary transaction data, and

(v) determine at least one category of vacation travel for the particular cardholder based on the plurality of purchase transactions within the at least one associated merchant category;

[(d)] receiving a plurality of vacation options including at least one vacation attribute;

[(e)] *identifying, by the vacation recommendation computer device, at least one vacation option responsive to the particular cardholder by comparing the plurality of cardholder vacation characteristics in the at least one determined category of vacation travel to the at least one vacation attribute; and*

[(f)] *recommending the at least one identified vacation option to the cardholder.*

Principles of Law

A. SECTION 101:

Inventions for a “new and useful process, machine, manufacture, or composition of matter” generally constitute patent-eligible subject matter. 35 U.S.C. § 101. However, the U.S. Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[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).

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

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental

economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

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

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must examine the elements of the claim to determine whether it contains an ‘inventive

concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221 (internal quotation marks omitted). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (alterations in original) (quoting *Mayo*, 566 U.S. at 77). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

B. USPTO SECTION 101 GUIDANCE:

In January 2019, the U.S. Patent and Trademark Office (“USPTO”) published revised guidance on the application of 35 U.S.C. § 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“2019 Guidance”), *updated by* USPTO, *October 2019 Update: Subject Matter Eligibility* (available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf) (“October 2019 Guidance Update”); *see also* October 2019 Patent Eligibility Guidance Update, 84 Fed. Reg. 55942 (Oct. 18, 2019) (notifying the public of the availability of the October 2019 Guidance Update). “All USPTO personnel are, as a matter of internal agency management, expected to follow the guidance.” 2019 Guidance, 84 Fed. Reg. at 51; *see also* October 2019 Guidance Update at 1.

Under the 2019 Guidance, we first look to whether the claim recites the following:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activities 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)).
2019 Guidance, 84 Fed. Reg. at 52–55.

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

(3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, [and] 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.
2019 Guidance, 84 Fed. Reg. at 56.

Analysis

STEP 2A, PRONG 1:

Under step 2A, prong 1, of the 2019 Guidance, we first look to whether the claim recites any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activities such as a fundamental economic practice, or mental processes). 84 Fed. Reg. at 52–54.

Limitation (a) recites the step of “receiving a plurality of cardholder transaction data associated with a particular cardholder.” Receiving data constitutes a certain method of organizing human activity that entails managing interactions between people. The 2019 Guidance expressly recognizes this type of certain method of

organizing human activity as constituting a patent-ineligible abstract idea. 2019 Guidance, 84 Fed. Reg. at 52.

Receiving data additionally constitutes a mental process that entails an observation that can be performed in the human mind. The 2019 Guidance also recognizes mental processes, including observations, as constituting a patent-ineligible abstract idea. 2019 Guidance, 84 Fed. Reg. at 52.

Accordingly, limitation (a) recites a patent-ineligible abstract idea.

Limitations (b) and (c) recite the following steps:

[(b)] determining, from the received cardholder transaction data, a primary region associated with the particular cardholder;

[(c)] processing the received plurality of cardholder transaction data to (i) distinguish vacation transaction data from ordinary transaction data based on at least one of a card-present transaction location outside of the primary region and a merchant category, included with each cardholder transaction data, (ii) associate one or more merchant categories with a respective category of vacation travel, (iii) determine that the particular cardholder has initiated a plurality of purchase transactions within at least one of the associated merchant categories, (iv) determine a plurality of cardholder vacation characteristics from at least one of the vacation transaction data and the ordinary transaction data, and (v) determine at least one category of vacation travel for the particular cardholder based on the plurality of purchase transactions within the at least one associated merchant category.

Both of limitations (b) and (c) constitute mental processes that can be performed in the human mind. More specifically, these steps entail evaluations or judgments that can be performed exclusively in the human mind or with the aid of pencil and paper. The 2019 Guidance expressly recognizes mental evaluations and judgments as constituting patent-ineligible abstract ideas. 2019 Guidance, 84 Fed. Reg. at 52. Accordingly,

limitations (b) and (c) recite judicial exceptions to patent-eligible subject matter.

Limitations (d) recites “receiving a plurality of vacation options including at least one vacation attribute.” For the reasons discussed above in relation to limitation (a), the data-receiving step of limitation (d) also recites a patent-ineligible abstract idea.

Limitation (e) recites “identifying . . . at least one vacation option responsive to the particular cardholder by comparing the plurality of cardholder vacation characteristics in the at least one determined category of vacation travel to the at least one vacation attribute.” Identifying options constitutes an evaluation or judgment that can be performed in the human mind. For the reasons set forth in relation to limitations (b) and (c), then, limitation (e) also recite a patent-ineligible abstract idea.

Limitation (f) recites “recommending the at least one identified vacation option to the cardholder.” Making a recommendation to another constitutes a certain method or organizing human activity. More specifically, the step entails an advertising, marketing, or sales activity, or a step of managing interactions between people, including teaching. The 2019 Guidance expressly recognizes these particular certain methods of organizing human activity as constituting abstract ideas. 2019 Guidance, 84 Fed. Reg. at 52.

Limitation (f) alternatively can be characterized as reciting a step of expressing an opinion. The 2019 Guidance recognizes the act of expressing an opinion as a mental process that constitutes an abstract idea. 2019 Guidance, 84 Fed. Reg. at 52. Accordingly, limitation (f) recites a patent-ineligible abstract idea.

For these reasons, each of limitations (a) through (f) recites a judicial exception to patent-eligible subject matter under step 2A, prong 1, of the 2019 Guidance.

STEP 2A, PRONG 2:

Under step 2A, prong 2, of the 2019 Guidance, we next analyze whether claim 1 recites additional elements that individually or in combination integrate the judicial exception into a practical application. 2019 Guidance, 84 Fed. Reg. at 53–55. The 2019 Guidance identifies considerations indicative of whether an additional element or combination of elements integrate the judicial exception into a practical application, such as an additional element reflecting an improvement in the functioning of a computer or an improvement to other technology or technical field. *Id.* at 55; MPEP § 2106.05(a).

The preceding analysis of claim 1’s recited abstract ideas indicates that claim 1’s “additional elements” only consist of the recited “vacation recommendation computer device,” as well as “a memory” and “a payment network” that is in communication with the vacation recommendation computer device.

Appellant asserts that the present claims are directed to an improvement to computer-related technology. Appeal Br. 7–12. More specifically, Appellant argues, “the pending claims are directed to a novel technique that uniquely distinguishes vacation transaction data from ordinary transaction data in a particular logical model for a database (see e.g., correlation Table 1 of the present specification) that facilitates further processing steps.” *Id.* at 7.

Appellant presents several arguments in support of this general assertion, for example:

the present claims plainly distinguish vacation transaction data and ordinary transaction data as two distinct subsets of received cardholder transaction data within the database, and these two distinct subsets are then separately utilized within the claims to make several associations and determinations according to the respective category into which the subsets are organized.

Id. at 9. Appellant further argues the technique used to create these distinct subsets is “innovative” and provides “the desired goal of a more accurate and flexible recommendation profile.” *Id.* at 10.

These arguments are unpersuasive because the “innovative” steps Appellant argues—e.g., distinguishing vacation transaction data from ordinary transaction data and making associations and determinations—entail the abstract ideas noted above in the analysis under step 2A, prong 1. That, is Appellant’s arguments improperly conflate the advantages of the underlying abstract idea with a purported technical improvement in the claim’s additional elements. “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.” *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018). “[A] claim for a new abstract idea is still an abstract idea.” *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (emphasis omitted). “What is needed is an inventive concept in the non-abstract application realm.” *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018).

Appellant further argues that the present claims are analogous to the self-referential tables found to be patent eligible in *Enfish* because the

present claims are “directed to a logical database structure that distinguishes, within the plurality of cardholder transaction data received from the payment network, vacation transaction data separately from ordinary transaction data.” Appeal Br. 9 (citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016)). Initially, we note that the pending claims do not recite a database structure. However, even if the claims were directed to a database structure, this argument still would not be persuasive because Appellant only discusses the database’s *content* without providing sufficient evidence that the database’s *structure* is innovative.

Appellant argues that “the pending claims do not merely collect and analyze cardholder transaction data, but instead first identify two distinct subgroups . . . within the [collected data], and separately store these distinct data subgroups within the same database.” Appeal Br. 11. Appellant also argues that the pending claims require the further step of correlating the data. *Id.* Again, these arguments are directed to the benefits of the underlying abstract idea—not to improvements to any of the additional elements—the computer device, the database, and memory that carry out the abstract idea.

Appellant further argues the Examiner’s comparison of the instant claims to the claims in *Electric Power Group* is erroneous:

In *Electric Power Group*, the claims were not found ineligible because they included the “collection, analysis, and display of collected information”, but instead because they included nothing more than the **collection[,] analysis and display** of information without any application of the collected data beyond its mere display. The present claims feature significantly more than the mere **collection and display** of data. Indeed, the present claims feature a database that collects one general form of cardholder transaction data, but then applies particular rules to the general collected data to distinguish the data into two distinct

categories of data (e.g., ordinary and vacation). The claims further recite using these two separate data categories within the database to associate merchant categories according to the primary region of the cardholder in a card-present transaction, and then determine previous transactions by the cardholder with the merchant categories, cardholder vacation characteristics, and a separate category of vacation travel in order to identify at least one vacation option for recommendation to the cardholder.

Appeal Br. 12 (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016) (emphasis modified)). Appellant also argues the pending claims are distinguished from *Electric Power Group* by the steps of applying particular rules, making determinations about cardholder regions, making determinations about merchant categories, and identifying vacation options.

To summarize, Appellant is effectively arguing that the claims of *Electric Power Group* were found to be patent ineligible because they merely entailed the collection, analysis, and display of information, whereas the present claims entail not only the collection and display of information, but also the evaluation and sorting of the information, as well as decision-making about what information to display based upon the evaluation of the sorted information. Appellant does not persuasively explain why, though, these argued steps entail more than collecting, analyzing, and displaying data. Accordingly, Appellant has not persuasively explained why the eligibility of claim 1 differs from that of the claims in *Electric Power Group*.

Similarly, Appellant argues “the rejection would improperly render every software-based invention ineligible as a per se rule, because essentially all software programming involves the ‘collection, analysis, and display of information.’” Appeal Br. 10. This argument also is unpersuasive. Many computer and software inventions entail significantly

more than merely collecting, analyzing, and displaying information. For example, in *Diehr*, a computer was used to improve the industrial process of opening a rubber-molding press at an appropriate time. *Diamond v. Diehr*, 450 U.S. 175 (1981); *see also McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1316 (Fed. Cir. 2016) (noting that incorporating limited rules structured to reflect a specific implementation that would not likely have been utilized by humans made a claim patent-eligible).

Furthermore, *Electric Power Group* does not set forth a per se rule that collecting, analyzing, and displaying information is patent ineligible. The *Electric Power Group* court expressly distinguished patent-ineligible processes that entail “merely presenting the results of abstract processes of collecting and analyzing information, without more” from patent-eligible processes, such as those that entail “identifying a particular tool for presentation” (*Elec. Power Grp.*, 830 F.3d at 1354), new techniques for analyzing data (*id.* at 1355), and using non-generic technology for gathering data (*id.* at 1356).

Appellant further argues that claim 1 includes claim features that recite significantly more than “simply . . . an instruction to implement or apply the abstract idea on a computer.” Appeal Br. 12–13 (quoting *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016)). Appellant additionally argues that all of claim 1’s additional elements also must be considered in combination to determine if the inventive concept may be found in the non-conventional and non-generic arrangement of the additional elements.

More specifically, Appellant argues that the present claims “feature a new functionality provided to the central server of the payment network to

determine the recommendation profile to the cardholder.” Appeal Br. 14. According to Appellant, “[b]y performing the claimed techniques within the scope of the payment network authority, the pending claims achieve significantly more accurate recommendations over the conventional techniques.” *Id.* at 15. According to Appellant “[t]his example of new functionality provided to the server of the payment network is directly on point with the eligibility determination in *BASCOM*.” *Id.*

This argument is unpersuasive because Appellant does not demonstrate that the present invention entails arranging generic components to achieve some new filtering technique previously unknown in the art, as was the case in *BASCOM*. Rather, Appellant’s Specification indicates that Appellant’s invention merely entails programming a computer to filter for a particular type of content and then making abstract determinations based upon the filtered content. Spec. ¶¶ 2–3. The *BASCOM* court noted, “filtering [Internet] content is an abstract idea because it is a longstanding, well-known method of organizing human behavior, similar to concepts previously found to be abstract.” *BASCOM*, 827, F.3d at 1348.

Appellant argues the Examiner errs in determining that distinguishing ordinary transaction data from vacation transaction data can be done by a human analog:

This assertion is both factually and legally erroneous. The assertion is factually erroneous because transaction data from a payment card interchange payment network is known in the art to involve billions of payment card transactions yearly, and *typically utilizes* such advanced technology schemes such as EMV[®]-based cryptography, tokenization, and/or point-to-point encryption. A human being is physically incapable of mentally deciphering encrypted transaction data from a payment network. The claimed payment network is therefore not a “general purpose

computer” that merely automates human tasks. Quite the contrary, the interchange payment network is a specialized system of proprietary communications standards for the exchange of financial transaction data. (See e.g., specification at paragraph [0073]). A generic computer could not access or process the protected data of the payment network.

Appeal Br. 17 (emphasis added).

These arguments regarding the rejection’s factual accuracy are not persuasive.⁵ The elements cited by Appellant—EMV-based cryptography, tokenization, point-to-point encryption—may be “typically utilized” to implement the abstract ideas recited in the pending claims. *Id.* However, Appellant’s use of the word “typically” acknowledges that these additional elements, whether generic or not, are not inherent in the claim language. Similarly, Appellant points to no persuasive evidence that the claimed process necessarily “involve[s] billions of payment card transactions yearly” or analyzing any other number of transactions. As these argued elements are not necessarily covered by claim 1’s language, Appellant’s arguments are not commensurate in scope with the claim language.

For these reasons, Appellant does not persuade us that claim 1 is directed to an improvement in the function of a computer or to any other technology or technical field. MPEP § 2106.05(a). Nor does Appellant persuasively demonstrate that claim 1 is directed to a particular machine or transformation, or that claim 1 adds any other meaningful limitations for the purposes of the analysis under Section 101. MPEP §§ 2106.05(b), (c), (e). Accordingly, Appellant does not persuade us that claim 1 integrates the

⁵ We address Appellant’s subsequent argument that the Examiner’s statement is *legally* erroneous (Appeal Br. 17) below, in the section of our analysis that addresses step 2B under the 2019 Guidance.

recited abstract ideas into a practical application within the meaning of the 2019 Guidance. *See* 2019 Guidance, 84 Fed. Reg. at 52–55.

STEP 2B:

Under step 2B of the 2019 Guidance, we next analyze whether claim 1 adds any specific limitations beyond the judicial exception that, either alone or as an ordered combination, amount to more than “well-understood, routine, conventional” activity in the field. 84 Fed. Reg. at 56; MPEP § 2106.05(d).

The Examiner determines that the additional elements of claim 1—the vacation recommendation computer device, the memory, and the payment network—viewed individually and as an ordered combination, merely entail well-understood and conventional components that do not add significantly more to the identified abstract ideas. Ans. 10–11.

Appellant acknowledges that at the time of the pending application, payment networks were known for processing payment card transactions and settling funds between financial institutions. Appeal Br. 14–15. Appellant argues, though, that there is no evidence in the record indicating that it was well-understood, routine, and conventional to implement database techniques, at the payment network side, for separating vacation transaction data from ordinary transaction data to correlate patterns from these separate data types. *Id.* at 15. Appellant further argues, “[t]he cited prior art further demonstrates that it was not known in the field to separately analyze these two distinct subsets of data and then correlate the separate result therefrom.” Appeal Br. 15–16.

These arguments are unpersuasive because Appellant is effectively arguing that the invention, as claimed, is patent eligible because it is novel

and unobvious. However, “[t]he ‘novelty’ of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.” *Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981). *See Mayo*, 566 U.S. at 90 (a novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent ineligible); *see also Parker v. Flook*, 437 U.S. 584, 594–95 (1978) (holding claims to “a new and presumably better method for calculating alarm limit values,” of undisputed usefulness, to be directed to patent-ineligible subject matter); *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013) (“Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry.”).

Furthermore, Appellant’s Specification does not indicate that consideration of these conventional elements as an ordered combination adds any significance beyond the additional elements, as considered individually. Rather, Appellant’s Specification indicates that the invention is directed to an abstract idea that is made more efficient with generic computer components—the abstract idea of recommending vacation options based on consumer analytics, such as historical travel by a consumer. Spec. ¶ 1.

Aside from Appellant’s Specification, the Appeal Brief summarizes Appellant’s invention as follows:

The pending claims provide an inventive concept of utilizing purchase transaction information to separately distinguish vacation transaction information from ordinary transaction information. The prior art systems of record do not distinguish between vacation transaction information and ordinary transaction information, nor in particular in the case of

a desired outcome of making a vacation recommendation to a cardholder. According to the non-conventional and non-generic techniques of the pending claims, however, more relevant vacation options can be presented to cardholders, while also reducing (i) advertising and marketing costs to consumers that would express lower interest in the vacation options, and (ii) the time spent by cardholders to identify their own relevant vacation options. (See paragraph [0060] of the present specification).

Appeal Br. 16. This summary further evidences that Appellant views their inventive concept to be the improvement of an abstract idea, not the improvement of the generic computer.

For these reasons, Appellant does not persuade us the Examiner committed reversible error in determining that claim 1 fails to recite additional elements that, either individually or as an ordered combination, amount to significantly more than the judicial exception within the meaning of the 2019 Guidance. 84 Fed. Reg. at 52–55; MPEP § 2106.05(d).

Accordingly, we sustain the Examiner’s rejection of claim 1 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. We, likewise, sustain the 101 rejection of claims 2–20, which Appellant does not argue separately. Appeal Br. 17.

THE SECTION 103 REJECTIONS

Determination and Contentions

The Examiner finds Williams teaches “determining, from the received cardholder transaction data, a primary region associated with the particular user” and “processing the received plurality of cardholder transaction data to (i) distinguish vacation transaction data from ordinary transaction data based on at least one of a card-present transaction location outside of the primary region and a merchant category, included with each cardholder transaction

data.” Final Act. 9. The Examiner finds Williams fails to teach, but Winters teaches, that the transaction data is cardholder transaction data and that the user in the determining step is a cardholder. *Id.* at 10–11. The Examiner also finds Williams fails to teach, but Winters teaches, a merchant category. *Id.* at 10–12.

Appellant argues, as follows:

the outstanding rejection is legally deficient for failing to give reasonable consideration to the claim limitations requiring the processing of the cardholder transaction data to generate a database that distinguishes vacation transaction data separately from ordinary transaction data, or how this database is further used to determine a primary region of the cardholder and a particular merchant category, associate the merchant category with a vacation travel category, determine cardholder transactions with the merchant category, and determine cardholder vacation characteristics from the separated data.

Appeal Br. 18–19.

Analysis

We first address the Examiner’s determinations regarding the Williams reference. Williams teaches a consumer contributes information to generate a consumer profile. Williams ¶ 38. This contributed data may include location, home-address, and vacation data. *Id.* Williams does not teach that vacation data is gleaned or derived from transaction data. In fact, Williams describes data contributed by a consumer as separate from data “received, culled, collected, and/or derived” from a consumer’s transaction history. *Id.* ¶ 36. As such, the Examiner has not established that Williams teaches “determining . . . [that] a primary region associated with the particular cardholder” specifically “from the received cardholder transaction data,” as recited in claim 1’s limitation (b). Nor has the Examiner

established that Williams teaches processing the received plurality of cardholder transaction data specifically to “distinguish vacation transaction data from ordinary transaction data based on at least one of a card-present transaction location outside of the primary region,” as recited in claim 1’s limitation (c)(i).

We next address the Examiner’s reliance on Winters. As noted above, the Examiner relies on Winters to teach a “merchant category.” Final Act. 12. However, the Examiner does not sufficiently explain why one of ordinary skill in the art would have sought to “distinguish vacation transaction data from ordinary transaction data” specifically based on Winters’s merchant-category transaction data. *See* Final Act. 13.

Based on the present record, then, the Examiner has not established a prima facie case of obviousness. “[A] rejection cannot be predicated on the mere identification . . . of individual components of claimed limitations. Rather particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.” *Ecolochem, Inc. v. Southern Calif. Edison Co.*, 227 F.3d 1361, 1375 (Fed. Cir. 2000).

We, therefore, do not sustain the obviousness rejection of claim 1 over the combination of Williams and Winters. We, likewise, do not sustain the obviousness rejection of independent claims 8 and 15, which recite similar limitations to claim 1, or of claims 3, 4, 10, 11, 17, and 18, which depend from one of claims 1, 8, or 15.

With respect to the remaining obviousness rejections of dependent claims 2, 5–7, 9, 12–14, 16, 19, and 20, the Examiner does not rely on the additionally cited references, Fikes, Gray, Rugge, and Goenka, to cure the

noted deficiencies of the rejection over Williams and Winters. Final Act. 14–19. Accordingly, we, likewise, do not sustain the obviousness rejections of these claims for the reasons set forth above in relation to claim 1 above.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/ Basis	Affirmed	Reversed
1–20	101	Eligibility	1–20	
1, 3, 4, 8, 10, 11, 15, 17, 18	103	Williams, Winters		1, 3, 4, 8, 10, 11, 15, 17, 18
2, 9, 16	103	Williams, Winters, Gray, Rugge		2, 9, 16
5, 6, 12, 13, 19, 20	103	Williams, Winters, Fikes		5, 6, 12, 13, 19, 20
7, 14	103	Williams, Winters, Goenka		7, 14
Overall Outcome			1–20	

TIME PERIOD FOR RESPONSE

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

AFFIRMED