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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte VALERIE NYGAARD and RYAN LINDSEY HELFT

Appeal 2019-006811
Application 14/457,963
Technology Center 3600

Before CAROLYN D. THOMAS, MICHAEL J. STRAUSS, and
JEREMY J. CURCURI, *Administrative Patent Judges*.

CURCURI, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–20. 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(a). Appellant identifies the real party in interest as eBay Inc. Appeal Br. 2.

CLAIMED SUBJECT MATTER

The claims are directed to “social media-based recommendations.”
Spec. ¶ 2. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method comprising:

receiving, via a user interface element displayed on a device of a user, by one or more processors, a user request from other users for a recommendation of an item;

accessing, from a data storage, a set of comments provided by one or more other users responding to the request;

parsing the set of comments to identify a set of items in a coupled database;

selecting a recommended item from the set of items identified from the coupled database; and

generating and transmitting, to the device of the user, a user interface that presents information about the recommended item to the user.

REJECTION

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

PRINCIPLES OF LAW

A. Section 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.

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. *E.g.*, *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-part framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). 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 waterproof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1853))); 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.* (citation omitted) (citing *Benson* and *Flook*); *see, 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 (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 § 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019)

(“2019 Revised Guidance”).² “All USPTO personnel are, as a matter of internal agency management, expected to follow the guidance.” *Id.* at 51; *see also* October 2019 Update at 1.

Under the 2019 Revised Guidance and the October 2019 Update, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes) (“Step 2A, Prong One”); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h) (9th ed. Rev. 08.2017, Jan. 2018)) (“Step 2A, Prong Two”).³

2019 Revised 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, under Step 2B, to whether the claim:

² In response to received public comments, the Office issued further guidance on October 17, 2019, clarifying the 2019 Revised Guidance. USPTO, *October 2019 Update: Subject Matter Eligibility* (the “October 2019 Update”) (available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf).

³ This evaluation is performed by (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception, and (b) evaluating those additional elements individually and in combination to determine whether the claim as a whole integrates the exception into a practical application. *See* 2019 Revised Guidance - Section III(A)(2), 84 Fed. Reg. 54–55.

(3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

2019 Revised Guidance, 84 Fed. Reg. at 52–56.

OPINION

The Examiner determines, under Step 1, the independent claims (claims 1, 17, and 20) are directed to a statutory category “because they are directed to a method, a system, and a computer readable medium.” Final Act. 2.

The Examiner further determines, under Step 2A, Prong One, the independent claims recite an abstract idea because the claims recite “a certain method of organizing human activity since it involves commercial interactions, such as advertising and marketing or sales activities or behaviors.” Final Act. 3.

The Examiner further determines, under Step 2A, Prong Two, the additional elements recited in the independent claims do not integrate the abstract idea into a practical application because

these elements do not amount to an improvement in the functioning of a computer or any other technology or technical field, apply the judicial exception with, or by use of, a particular machine, or apply or use the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception.

Final Act. 4; *see also* Final Act 4 (determining the dependent claims also do not integrate the abstract idea into a practical application).

The Examiner further determines, under Step 2B, the independent claims and the dependent claims do not recite an element, or combination of elements, that is enough to ensure that the claim is directed to significantly more than a judicial exception. *See* Final Act. 4–5.

Are the claims patent-eligible?

Step 1

Claim 1 recites a method, which falls within the “process” category of 35 U.S.C. § 101. Claim 17 recites a system, which falls within the “machine” category of 35 U.S.C. § 101. Claim 20 recites a non-transitory machine-readable storage medium, which falls within the “manufacture” category of 35 U.S.C. § 101. Thus, we must determine whether the claim recites a judicial exception and fails to integrate the exception into a practical application. *See* 2019 Revised Guidance, 84 Fed. Reg. at 54–55. If both elements are satisfied, the claim is directed to a judicial exception under the first step of the *Alice/Mayo* test. *See id.*

Step 2A, Prong One

Independent claim 1 (emphasis added to indicate abstract concepts) recites the following steps:

[i] *receiving*, via a user interface element displayed on a device of a user, by one or more processors, *a user request from other users for a recommendation of an item*;

[ii] *accessing*, from a data storage, *a set of comments provided by one or more other users responding to the request*;

[iii] *parsing the set of comments to identify a set of items in a coupled database;*

[iv] *selecting a recommended item from the set of items identified from the coupled database; and*

[v] *generating and transmitting, to the device of the user, a user interface that presents information about the recommended item to the user.*

Steps [i] and [ii] encompass a person asking for a recommendation from a group of friends, and then the group of friends providing responses. *See* Drawing, FIG. 4, elements 410, 420a–420c. Thus, steps [i] and [ii] describe “social activities” and are thus “managing personal behavior or relationships or interactions between people.” 2019 Revised Guidance, 84 Fed. Reg. at 52. Thus, these steps recite the abstract concept of “[c]ertain methods of organizing human activity.” *Id.*

Steps [iii]–[v] encompass another person observing the responses from the group of friends, and making a recommendation (advertisement) to the person who asked for the recommendation. *See* Drawing, FIG. 4, element 430, FIG. 8, elements 810, 820, 830. Thus, steps [iii]–[v] describe “advertising, marketing or sales activities or behaviors” and are thus “commercial or legal interactions.” 2019 Revised Guidance, 84 Fed. Reg. at 52. Thus, these steps recite the abstract concept of “[c]ertain methods of organizing human activity.” *Id.*

Thus, we determine independent claim 1 recites a judicial exception. For these same reasons, we also determine independent claims 17 and 20 recite a judicial exception.

Step 2A, Prong Two

Because independent claims 1, 17, and 20 recite a judicial exception, we next determine if the claims recite additional elements that integrate the judicial exception into a practical application.

In addition to the limitations of claim 1 discussed above that recite abstract concepts, claim 1 further recites “a user interface element displayed on a device of a user”; “one or more processors”; “a data storage”; “a coupled database”; and “a user interface.” The Specification does not provide additional details that would distinguish the additional limitations from a generic implementation of the abstract idea.

Appellant’s Specification discloses

FIG. 4 is a block diagram 400 illustrating a user interface suitable for social media-based recommendations, according to some example embodiments. As can be seen in block diagram 400, the user interface is titled “My Page” and includes a request for a recommendation 410, three responses to the request 420a-420c, and a recommendation 430 for an item.

Spec. ¶ 51; *see also* Drawing, Fig. 4. Thus, the recited “a user interface element displayed on a device of a user” and “a user interface” are described in the Specification and depicted in the Drawing in a way that does not distinguish from a generic implementation.

Appellant’s Specification discloses “FIG. 11 is a block diagram of machine in the example form of a computer system 1100 within which instructions 1124 may be executed for causing the machine to perform any one or more of the methodologies discussed herein.” Spec. ¶ 95. Appellant’s Specification further discloses “[t]he example computer system 1100 includes a processor 1102 (e.g., a central processing unit (CPU).” Spec. ¶

96; *see also* Drawing, FIG. 11. Thus, the recited “one or more processors” also are described in the Specification and depicted in the Drawing in a way that does not distinguish from a generic implementation.

Appellant’s Specification discloses “[i]n operation 1010, the application server 118 accesses communications from users (e.g., using the communication module 210 or the storage module 240) and detects recommendations in the communications (e.g., using the recognition module 220).” Spec. ¶ 76. Appellant’s Specification further discloses “[t]he application servers 118 are, in turn, shown to be coupled to one or more database servers 124 that facilitate access to one or more databases 126.” Spec. ¶ 26. Thus, the recited “a data storage” and “a coupled database” (storage module 240, databases 126) also are described in the Specification and depicted in the Drawing in a way that does not distinguish from a generic implementation.

Claim 17 further recites “a memory” and “one or more modules coupled to the memory.” Claim 20 further recites “[a] non-transitory machine-readable storage medium.” Appellant’s Specification discloses the following:

The example computer system 1100 includes a processor 1102 (e.g., a central processing unit (CPU), a graphics processing unit (GPU) or both), a main memory 1104 and a static memory 1106, which communicate with each other via a bus 1108. The computer system 1100 may further include a video display unit 1110 (e.g., a liquid crystal display (LCD) or a cathode ray tube (CRT)). The computer system 1100 also includes an alphanumeric input device 1112 (e.g., a keyboard or a touch-sensitive display screen), a user interface (UI) navigation (or cursor control) device 1114 (e.g., a mouse), a disk drive unit 1116, a signal generation device 1118 (e.g., a speaker) and a network interface device 1120.

Spec. ¶ 96; *see also* Drawing, FIG. 11. Thus, the recited “a memory”; “one or more modules coupled to the memory”; and “[a] non-transitory machine-readable storage medium” also are described in the Specification and depicted in the Drawing in a way that does not distinguish from a generic implementation.

We do not find the recited computer-related limitations are sufficient to integrate the judicial exception into a practical application. Specifically, there is no improvement to the functioning of the computer, but, instead, the computer merely implements the abstract idea. In this case, we do not see any particular machine or manufacture that is integral to the claim; nor do we see any transformation. That is, we do not see any of the additionally recited elements applying or using the judicial exception in any meaningful way beyond generally linking the judicial exception to the recited elements.

Accordingly, we determine that claims 1, 17, and 20 are directed to a judicial exception because they do not recite additional elements that integrate the recited judicial exception into a practical application.

Is there something else in the claims that ensures that they are directed to significantly more than a patent ineligible concept?

Step 2B

Because claims 1, 17, and 20 are directed to a judicial exception, we must determine, according to *Alice*, whether these claims recite an element, or combination of elements that is enough to ensure that the claim is directed to significantly more than a judicial exception.

The conventional or generalized functional terms by which the computer components are described reasonably indicate that Appellant’s Specification discloses conventional components. *See* Spec. ¶¶ 26, 51, 76,

95, 96. Further, the Specification does not provide additional details about the computer that would distinguish the recited components from generic implementation individually and generic implementation in the combination. *See Spec.* ¶¶ 26, 51, 76, 95, 96.

In view of Appellant’s Specification, the claimed computer components are reasonably determined to be generic, purely conventional computer elements. Thus, the claims do no more than require generic computer elements to perform generic computer functions, rather than improve computer capabilities.

Accordingly, we determine that claims 1, 17, and 20 are not directed to significantly more than a patent ineligible concept.

Appellant’s principal arguments

Appellant presents the following principal arguments:

i. “[T]he majority of the limitations’ describe specific operations to be performed in selecting the recommended item. Thus, the present claims are distinguished from those at issue in *Ultramerical[, Inc. v. Hulu, LLC*, 772 F.3d 709 (Fed Cir. 2014)], and *Ultramerical* does not support the Examiner’s assertion that the present claims are directed to an abstract idea.” Appeal Br. 12; *see also* Reply Br. 2.

ii. “Unlike the claims at issue in [*In re*] *Ferguson*[, 558 F.3d 1359 (Fed Cir. 2009)], the present method claims are machine-implemented, reciting (in claim 1 alone) ‘a user interface element displayed on a device of a user,’ ‘one or more processors,’ ‘a data storage,’ ‘a coupled database,’ and ‘generating and transmitting, to the device of the user, a user interface.’” Appeal Br. 13; *see also* Reply Br. 2.

iii. “Similarly [to *DDR Holdings v. Hotels.com*, 773 F.3d 1245 (Fed Cir. 2014)], the independent claims of the present application do not merely recite the performance of ‘some business practice known from the pre-Internet world’ but yield ‘a result that overrides the routine and conventional sequence of events.’” Appeal Br. 14.

iv. “[T]here is no prior art that teaches the specific claimed method of selecting a recommended item. Accordingly, a computer system that implements the method of claim 1 achieves the ‘practical application’ of providing improved item recommendations.” Appeal Br. 14; *see also* Reply Br. 3; *see also* Reply Br. 3 (“The Examiner’s insistence that the claims are non-obvious but nonetheless recite only well-known and conventional activity cannot be reconciled.”).

v. “The present claims include improvements to this technology by, for example, ‘providing recommendations without accessing private data’ or ‘without requiring the user to explicitly craft a query.’” Appeal Br. 15 (citing Spec. ¶ 82); *see also* Reply Br. 4 (“Applicant submits that when each claim is considered as a whole, rather than examined piecemeal, the claims recite ‘significantly more’ than the alleged abstract idea.”).

vi. Regarding dependent claim 8, “contrary to the Examiner’s allegation that dependent claim 8 is ‘part of the abstract idea itself,’ [] the additional elements of dependent claim 8 serve to make the claim less abstract.” Appeal Br. 15–16; *see also* Reply Br. 4.

vii. Regarding dependent claim 9, “contrary to the Examiner’s allegation that dependent claim 9 is ‘part of the abstract idea itself,’ [] the additional element of dependent claim 9 serves to make the claim less abstract.” Appeal Br. 16; *see also* Reply Br. 4.

viii. Regarding dependent claim 10, “contrary to the Examiner’s allegation that dependent claim 10 is ‘part of the abstract idea itself,’ [] the additional elements of dependent claim 10 serve to make the claim less abstract.” Appeal Br. 17; *see also* Reply Br. 4.

ix. Regarding dependent claim 11, “contrary to the Examiner’s allegation that dependent claim 11 is ‘part of the abstract idea itself,’ [] the additional elements of dependent claim 11 serve[] to make the claim less abstract.” Appeal Br. 18–19; *see also* Reply Br. 4.

We have considered the issues raised by Appellant’s arguments, and we remain persuaded the claims are directed to a judicial exception without significantly more.

Appellant’s arguments (i), (ii), and (iii) do not show any error because, as we explain above, the argued elements of claims 1, 17, and 20 are the abstract concepts of “[c]ertain methods of organizing human activity.” 2019 Revised Guidance, 84 Fed. Reg. at 52; *see also* Ans. 3–4. We appreciate Appellant’s arguments with respect to *Ulramercial*, *Ferguson*, and *DDR Holdings*, however, in determining that the claims recite the abstract concepts of “[c]ertain methods of organizing human activity,” we have cited to Appellant’s application and to the 2019 Revised Guidance and have explained, with reasoning for each claim step, why the claims recite the abstract concepts of “[c]ertain methods of organizing human activity.” 2019 Revised Guidance, 84 Fed. Reg. at 52. We also explain that the claims do not recite additional elements that integrate the recited judicial exception into a practical application, and are not directed to significantly more than a patent ineligible concept.

Appellant’s argument (iv) also does not show any error. Regarding any novelty of the claimed approach to selecting a recommended item, these arguments do not show error in the Examiner’s conclusions because the argued elements of claims 1, 17, and 20 are part of the abstract idea. The claims do no more than require generic computer elements to perform generic computer functions, rather than improve computer capabilities. Put another way, “[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 [section] 101 categories of possibly patentable subject matter.” *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1315 (Fed. Cir. 2016) (quoting *Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981)); *see also* Ans. 4–5.

Appellant’s argument (v) also does not show any error for same reasons explained above when addressing arguments (i)–(iv). *See* Ans. 5–6.

Appellant’s argument (vi)–(ix) also do not show any error. Claim 8 further recites “accessing a size of the set of comments provided by the one or more other users; and the selecting of the recommended item occurs in response to a determination that the size exceeds a threshold.” Claim 9 further recites “the selecting of the recommended item is based on a weight associated with each comment provided by the one or more other users.” Claim 10 further recites

identifying a user corresponding to each comment, from the one or more other users; and

for each identified user, determining a number of previously-provided comments that were followed; and

the weight associated with each comment is based on the determined number for the user providing the comment.

Claim 11 further recites “for each previously-provided comment that was followed, determining whether the following of the comment resulted in a purchase; and the number for the user that provided the comment that resulted in a purchase is adjusted based on the determination.” These further limitations of claims 8–11 describe additional aspects of the “advertising, marketing or sales activities or behaviors” and are thus “commercial or legal interactions.” 2019 Revised Guidance, 84 Fed. Reg. at 52. Accordingly, claims 8–10 recite the abstract concept of “[c]ertain methods of organizing human activity.” *Id.* Thus, the claim limitations of claims 8–11 do not improve the functionality of the various hardware components, nor do they achieve an improved technological result in conventional industry practice. *McRO, Inc. v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299, 1316 (Fed. Cir. 2016). More particularly, we do not agree that the further limitations in claims 8–11 improve the *technology* as a whole. Accordingly, we determine that claims 8–11 are also not directed to significantly more than a patent ineligible concept.

We, therefore, do not sustain the Examiner’s rejection of claims 1–20.

CONCLUSION

The Examiner’s decision to reject claims 1–20 is affirmed.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–20	101	Judicial Exception	1–20	

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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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED