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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/315,198	12/08/2011	Steven Dennis Flinn	Many-09A8A	8337
53928	7590	10/29/2019	EXAMINER	
MANYWORLDS, INC. IP DEPARTMENT 5476 BRIDLE CREEK LANE BRENHAM, TX 77833			SWARTZ, STEPHEN S	
			ART UNIT	PAPER NUMBER
			3623	
			MAIL DATE	DELIVERY MODE
			10/29/2019	PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte STEVEN DENNIS FLINN and
NAOMI FELINA MONEYPENNY

Appeal 2018-006544
Application 13/315,198
Technology Center 3600

Before JOSEPH A. FISCHETTI, BRUCE T. WIEDER, and
KENNETH G. SCHOPFER, *Administrative Patent Judges*.

WIEDER, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ seeks review under 35 U.S.C. § 134 from the Examiner's final rejection of claims 5, 7, 10, and 11. 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 ManyWorlds, Inc. (Appeal Br. 3.)

CLAIMED SUBJECT MATTER

Appellant's "invention relates to extending the business process paradigm so as to make processes more explicitly adaptive over time."
(Spec. 1, ll. 9–10.)

Claims 5, 7, 10, and 11 are independent claims and are the only claims on appeal. Claim 5 is illustrative. It recites:

5. A method comprising:
 - accessing through execution of a computer-implemented function on a processor-based device a plurality of usage behaviors that are performed through a first user's use of a portable processor-based device;
 - identifying a physical location of a second user;
 - delivering to the first user through execution of a computer-implemented function on a processor-based device a plurality of objects that are arranged in a temporal sequence, wherein at least two of the plurality of objects comprise user activities, wherein one of the at least two user activities comprises a reference to the physical location of the second user, and wherein the plurality of objects are selected for delivery to the first user in accordance with an inference of a preference based, at least in part, on a plurality of inference weightings that are determined in accordance with usage behavior priority rules that are applied to the plurality of usage behaviors; and
 - delivering to the first user the plurality of objects, wherein the plurality of objects are selected for delivery to the first user in accordance with the inference of the preference, wherein the inference of the preference is based, at least in part, on usage behaviors associated with a plurality of users.

REJECTION

Claims 5, 7, 10, and 11 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

ANALYSIS

Claim 5

“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. Section 101, however, “contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (quoting *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)).

Alice applies a two-step framework, earlier set out 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*, 573 U.S. at 217.

Under the two-step framework, it must first be determined if “the claims at issue are directed to a patent-ineligible concept.” *Id.* at 218. If the claims are determined to be directed to a patent-ineligible concept, e.g., an abstract idea, then the second step of the framework is applied to determine if “the elements of the claim . . . contain[] an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Id.* at 221 (citing *Mayo*, 566 U.S. at 72–73, 79).

With regard to step one of the *Alice* framework, we apply a “directed to” two prong test to: 1) evaluate whether the claim recites a judicial exception, and 2) if the claim recites a judicial exception, evaluate whether the claim “appl[ies], rel[ies] on, or use[s] 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.” *See* USPTO, 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50, 54 (Jan. 7, 2019) [hereinafter “2019 Guidance”].

Here, the Examiner determines that claim 5 is “directed to the abstract idea of delivering predicted objects based on gathered information from locational data and preference data which is analyzed.” (Final Action 8.) The Examiner further determines that this is a mental process that can be performed in the human mind or by using a pen and paper. (*Id.* at 9.)

Appellant disagrees and argues that “claim 5 clearly represents an improvement to a *technological process* . . . in which a computer-based recommender process and system automatically adapts to usage.” (Appeal Br. 12.)

Under step one of the *Alice* framework, we “look at the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)).

The ‘directed to’ inquiry . . . cannot simply ask whether the claims *involve* a patent-ineligible concept, because essentially every routinely patent-eligible claim involving physical products and actions *involves* a law of nature and/or natural phenomenon Rather, 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.’ *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015).

Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1335 (Fed. Cir. 2016).

Thus, the first step of the *Alice* framework “asks whether the focus of the

claims is on the specific asserted improvement in [the relevant technology] or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Id.* at 1335–36; *see also* 2019 Guidance at 54–55.

The Specification provides evidence as to what the claimed invention is directed. In this case, the Specification discloses that the “invention relates to extending the business process paradigm so as to make processes more explicitly adaptive over time.” (Spec. 1, ll. 9–10.) Claim 5 provides further evidence. Claim 5 recites “accessing . . . a plurality of usage behaviors that are performed through a first user’s use of a portable processor-based device,” “identifying a physical location of a second user,” “delivering to the first user . . . a plurality of objects that are arranged in a temporal sequence . . . wherein the plurality of objects are selected for delivery . . . in accordance with an inference of a preference based, at least in part, on a plurality of inference weightings,” “and delivering to the first user the plurality of objects . . . in accordance with the inference of a preference . . . based, at least in part, on usage behaviors associated with a plurality of users.”

In other words, claim 5 recites observation (accessing usage behaviors, identifying a location), evaluation (inferring preferences), judgment (selecting and arranging objects for display/delivery), and display/delivery of objects. Save for display/delivery, which is, at best, a post-solution activity, these are all concepts that may be performed in the human mind. That is, claim 5 recites the abstract idea of mental processes. (*See* 2019 Guidance at 52; *see also* Final Action 8–9.)

The steps of claim 5 are performed by accessing information, identifying a user's location, and analyzing, arranging, and presenting information. Claim 5 recites a generic "processor based device" and a generic "portable processor-based device" to perform the accessing, analyzing, arranging, and presenting tasks. (*See Spec.* 103, ll. 3–13.) Claim 5 does not recite what performs the identifying task. Regardless, none of the limitations of claim 5 recite technological implementation details. The claim simply recites functional results to be achieved by any means. *See, e.g., Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) ("[T]he claims of the asserted patents are drawn to the abstract idea of 1) collecting data, 2) recognizing certain data within the collected data set, and 3) storing that recognized data in a memory."); *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1339–40 (Fed. Cir. 2017) (Claims to manipulating documents determined to be "at their core, directed to the abstract idea of collecting, displaying, and manipulating data."); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1369–70 (Fed. Cir. 2015) (Tailoring information presented to a user based on particular information determined to be directed to an abstract idea.).

In view of the above, we determine that claim 5 is directed to accessing usage behaviors, identifying a user's location, inferring preferences, selecting and arranging objects for display, and display of objects. These, except for the post-solution step of display, are mental processes or processes that can be performed with a pen and paper, i.e., mental processes. In short, claim 5 is directed to the abstract idea of mental processes. (*See 2019 Guidance at 52.*)

Although we and the Examiner describe, at different levels of abstraction, to what the claim is directed, it is recognized that “[a]n abstract idea can generally be described at different levels of abstraction.” *Apple, Inc.*, 842 F.3d at 1240. That need not and, in this case, does not “impact the patentability analysis.” *See id.* at 1241.

In this case, we do not see how the generic recitation of a “processor-based device,” and a “mobile processor-based device,” even in conjunction with the recited functions, “ensure[s] ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Alice*, 573 U.S. at 221 (alterations in original) (quoting *Mayo*, 566 U.S. at 77). Claim 5 merely uses the generic processor-based device and generic mobile processor-based device as tools to perform the abstract idea.

Taking the claim elements separately, the functions performed by the generically recited processor-based device and portable processor-based device are purely conventional. As noted above, each step is expressed simply in terms of results, without implementation details, i.e., accessing information (usage behaviors and location), evaluating information, and presenting information. Limitations describing the nature of the information do not alter this. Providing, analyzing, receiving, and displaying information are well-understood, routine, and conventional functions previously known to the industry. *See Elec. Power Grp.*, 830 F.3d at 1356 (The claims “do not include any requirement for performing the claimed functions of gathering, analyzing, and displaying in real time by use of anything but entirely conventional, generic technology. The claims therefore do not state an arguably inventive concept”); *see also In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed.

Cir. 2011) (“Absent a possible narrower construction of the terms ‘processing,’ ‘receiving,’ and ‘storing,’ . . . those functions can be achieved by any general purpose computer without special programming.”).

Appellant argues that claim 5 “represents an improvement to a *technological process*,” and that an example of this is that “[b]y introducing different or additional behavioral characteristics, such as the duration of access of an item of content, on which to base updates to the structure of adaptive computer-based application 925, a more adaptive process is enabled.” (Appeal Br. 12 (quoting Spec. 25, ll. 3–6).) We do not find this argument persuasive.

The asserted improved technological process is simply how the data/information is interpreted and the particular results desired. It is not in how the processing technology achieves the desired results. Indeed, considered as an ordered combination, the generically recited processor-based device and generically recited portable processor-based device of Appellant’s claimed invention add nothing that is not already present when the limitations are considered separately. For example, claim 5 does not purport to improve the functioning of either the processor-based device or the portable processor-based device. Nor does the method of claim 5 effect an improvement in any other technology or technical field. Instead, claim 5 amounts to nothing significantly more than an instruction to apply the abstract idea using generic computer components performing routine computer functions. That is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 573 U.S. at 225–26.

Nonetheless, Appellant seeks to analogize claim 5 to the claims in *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016). (See Appeal Br. 13.) Specifically, Appellant argues that

McRO stands for the application of a specific set of rules to achieve the improvement to the technological process and was therefore found to *not* be directed to an abstract idea. Independent claim 5 likewise recites applying a specific set of rules—in its case, to improve inference-based recommendations through the applying of multiple inference weightings that are determined in accordance with usage behavior priority rules that are applied to the plurality of usage behaviors.

(*Id.*) We do not find this argument persuasive.

Claim 5 uses a generically recited processor-based device and a generically recited mobile processor-based device to perform the abstract idea. This does not improve the processor-based device or the mobile processor-based device. In *McRO*, on the other hand, “[t]he claimed improvement was to how the physical display operated (to produce better quality images).” *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018). In other words, in *McRO*, data was used to improve the technology, i.e., the display mechanism. Here, claim 5 recites observation (accessing usage behaviors, identifying a location), evaluation (inferring preferences), judgment (selecting and arranging objects for display/delivery), and display/delivery of objects. But Appellant does not sufficiently explain how these steps improve the technology itself. Claim 5 does not even recite “a particular way of programming or designing the software . . . , but instead merely claim[s] the resulting [method].” *Apple, Inc.*, 842 F.3d at 1241. In other words, “the claim language here provides only a result-oriented solution, with insufficient detail for how a computer

accomplishes it. Our law demands more.” *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1342 (Fed. Cir. 2017).

Appellant’s argument that the “claimed invention is an improvement to recommender technology by, for example, extending automatically generated recommendations to include user activities,” is not persuasive for the reasons discussed above. (*See* Appeal Br. 14–15.)

Step two of the *Alice* framework has been described “as 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.’” *Alice*, 573 U.S. at 217–18 (citing *Mayo*, 566 U.S. at 72–73).

Appellant argues that

claim 5 includes limitations such as accessing through execution of a computer-implemented function on a processor-based device a plurality of usage behaviors that are performed through a first user’s use of a portable processor-based device, and further, from usage behaviors associated with a plurality of users; identifying a physical location of a second user; and then delivering to the first user a plurality of objects that are arranged in a temporal sequence wherein at least two of the plurality of objects comprise user activities, and whereby the plurality of objects are selected for delivery to the first user in accordance with an inference of a preference based on a plurality of inference weightings that are determined in accordance with usage behavior priority rules that are applied to the plurality of usage behaviors. Appellants submit that these limitations clearly constitute *significantly more* than, for example, the Examiner’s posited abstract idea of “delivering predicted objects based on gathered information from locational data and preference data which is analyzed.”

(Appeal Br. 16.)

We disagree. As discussed above, each claim step is expressed simply in terms of results, without implementation details, i.e., accessing information (usage behaviors and location), analyzing information (inferring preferences), and presenting information (display/delivery of objects). The fact that the limitations describe the nature of the information do not alter this. In other words, the asserted improvement is, at best, an improvement to the abstract idea. But “[n]o matter how much of an advance in the . . . field the claims recite, the advance lies entirely in the realm of abstract ideas, with no plausibly alleged innovation in the non-abstract application realm.” *SAP Am., Inc.*, 898 F.3d at 1163.

Appellant also seeks to analogize claim 5 to the claims in *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016). (Appeal Br. 16–17.) Specifically Appellant argues “that it is indeed clear--applying a plurality of inference weightings that are determined in accordance with usage behavior priority rules that are applied to the plurality of usage behaviors *improves the effectiveness of recommendations by improving the effectiveness of the inferences of user preferences.*” (*Id.* at 17.)

We do not find this argument persuasive. In *BASCOM*, the court determined that “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.” *BASCOM*, 827 F.3d at 1350. Specifically, “[t]he inventive concept described and claimed in the ’606 patent is the installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user.” *Id.* at 1350. The Federal Circuit determined that this “particular arrangement of elements is a technical improvement over

prior art ways of filtering.” *Id.* Here, Appellant does not contend, and claim 5 does not specify, that the recited processor-based device and mobile processor-based device must be arranged in a non-conventional manner or even in any particular manner. Nor does Appellant explain how the claimed method allegedly improves the function of the processor-based device or the mobile processor-based device. *See, e.g., BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1288 (Fed. Cir. 2018) (“[A]n improvement to the information stored by a database is not equivalent to an improvement in the database’s functionality.”).

Appellant also argues that the “claimed invention certainly includes sufficient limitations such that there is no risk of the claimed invention preempting all or even a significant portion of the possible applications of Examiner’s posited abstract idea.” (Appeal Br. 18–19.)

We do not find this argument persuasive. Preemption is not a separate test. “Where a patent’s claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, as they are in this case, preemption concerns are fully addressed and made moot.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). In other words, “preemption may signal patent ineligible subject matter, [but] the absence of complete preemption does not demonstrate patent eligibility.” *Id.*

In view of the above, we are not persuaded that the Examiner erred in rejecting claim 5 under § 101.

Claim 7

Independent claim 7 contains similar limitations to those of claim 5, and Appellant relies on the arguments made regarding claim 5. (*See* Appeal Br. 19–20.) However, Appellant argues that claim 7 also recites “‘delivering to the first user the plurality of objects, wherein at least one object of the plurality of objects comprises an activity performed by a processor-based device,’ [and that this] would not be considered routine or conventional within the context of the other limitations of claim 7 at the time of the invention.” (Appeal Br. 20.)

A claim step that simply engages well-understood, routine, and conventional activity “is normally not sufficient to transform an unpatentable [abstract idea] into a patent-eligible application of such [an abstract idea].” *Mayo*, 566 U.S. at 79. In this case, Appellant’s argument is that the determined content of information delivered to the first user would not have been considered routine or conventional. (Appeal Br. 20.) We do not find this argument persuasive.

“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 the ineligible concept.” *BSG Tech LLC*, 899 F.3d at 1290. In other words, “under the *Mayo/Alice* framework, a claim directed to a newly discovered law of nature (or natural phenomenon or abstract idea) cannot rely on the novelty of that discovery for the inventive concept necessary for patent eligibility.” *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1376 (Fed. Cir. 2016). We are not persuaded that the Examiner erred in rejecting claim 7 under § 101.

Claim 10

Independent claim 10 contains similar limitations to those of claim 5, and Appellant relies on the arguments made regarding claim 5. (*See* Appeal Br. 20–21.) However, Appellant argues that claim 10 also recites “‘the processor configured to enable the first user to interact with the plurality of objects, wherein the interaction comprises a performance of a gesture,’ [and that this] would not be considered routine or conventional within the context of the other limitations of claim 10 at the time of the invention.” (*Id.* at 21.)

Appellant does not persuasively argue why such further detail in how the user interacts with the objects would result in the claim no longer being directed to observation (accessing usage behaviors, identifying a location), evaluation (inferring preferences), judgment (selecting and arranging objects for display/delivery), and display/delivery of objects. Moreover, claim 10, does not recite “a particular way of programming or designing the software . . . , but instead merely claim[s] the resulting [method].” *Apple, Inc.*, 842 F.3d at 1241. In other words, “the claim language here provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it.” *Intellectual Ventures I LLC*, 850 F.3d at 1342. Therefore, we are not persuaded that the Examiner erred in rejecting claim 10 under § 101.

Claim 11

Independent claim 11 contains similar limitations to those of claim 5, and Appellant relies on the arguments made regarding claim 5. (*See* Appeal Br. 21–22.) However, Appellant argues that claim 11 also recites “‘the processor configured to enable the first user to interact with the plurality of

objects, wherein the interaction comprises an audio-based communication,’ [and that this] would not be considered routine or conventional within the context of the other limitations of claim 11 at the time of the invention.” (*Id.* at 22.)

Once again, Appellant does not persuasively argue why such further detail in how the user interacts with the objects would result in the claim no longer being directed to observation (accessing usage behaviors, identifying a location), evaluation (inferring preferences), judgment (selecting and arranging objects for display/delivery), and display/delivery of objects. Nor does claim 11 recite “a particular way of programming or designing the software . . . , but instead merely claim[s] the resulting [method].” *Apple, Inc.*, 842 F.3d at 1241. In other words, “the claim language here provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it.” *Intellectual Ventures I LLC*, 850 F.3d at 1342. Therefore, we are not persuaded that the Examiner erred in rejecting claim 11 under § 101.

CONCLUSION

The Examiner’s rejection of claims 5, 7, 10, and 11 under 35 U.S.C. § 101 is affirmed.

Specifically:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
5, 7, 10, 11	101	eligibility	5, 7, 10, 11	

Appeal 2018-006544
Application 13/315,198

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