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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/265,397	09/14/2016	Gabriel Leydon	MZI-002C1	1382

142528 7590 09/02/2020

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ART UNIT	PAPER NUMBER
3715	

NOTIFICATION DATE	DELIVERY MODE
09/02/2020	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GABRIEL LEYDON and HALBERT NAKAGAWA

Appeal 2019-006368
Application 15/265,397
Technology Center 3700

Before JOHN C. KERINS, MICHELLE R. OSINSKI, and JEREMY M. PLENZLER, *Administrative Patent Judges.*

KERINS, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the Examiner's decision to reject claims 24–43, the only claims now pending, under 35 U.S.C. § 101 as being directed to patent ineligible subject matter.[2] We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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[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 MZ IP Holdings, LLC. Appeal Br. 2.

[2] Claims 1–23 are canceled. Appeal Br. 2.

CLAIMED SUBJECT MATTER

Claims 24, 34, and 43 are independent. Claim 24 is reproduced below.

> 24. A method using at least one computer processor, comprising:
>
> enabling, using the at least one computer processor, a user to interact within a first virtual environment,
>
> > wherein the first virtual environment comprises a plurality of measurable units configured to measure progress of the user within the first virtual environment;
>
> monitoring, using the at least one computer processor, at least one characteristic of the user within the first virtual environment;
>
> detecting, using the at least one computer processor, when the at least one characteristic of the user is below a predetermined threshold within the first virtual environment, and, based thereon:
>
> > displaying, using the at least one computer processor, a first interactive rewarded playable unit within at least a portion of the first virtual environment,
> >
> > > wherein the user plays the first interactive rewarded playable unit to generate additional measurable units for use within the first virtual environment by achieving a predetermined milestone in the first interactive rewarded playable unit;
> >
> > activating, using the at least one computer processor, the first interactive rewarded playable unit in response to a request by the user to engage in the first interactive rewarded playable unit;

> displaying, using the at least one computer processor, a second interactive rewarded playable unit within at least a portion of the first interactive rewarded playable unit at one or more intervals while the user engages in the first interactive rewarded playable unit; and
>
> activating, using the at least one computer processor, the second interactive rewarded playable unit in response to a request by the user to engage in the second interactive rewarded playable unit,
>
> wherein a probability of the user generating additional measurable units with the second interactive rewarded playable unit is configured using one or more computer-implemented predictive models based at least in part on a history of user interactions with the first interactive rewarded playable unit.

OPINION

Legal Principles

The patent laws provide that "[w]hoever 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. However, "this provision contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014) (citation omitted).

Mayo Collaborative Services established a framework to distinguish 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 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 77 (2012)). First, we determine whether the claims are directed

to a patent-ineligible concept. *Id.* If so, we next consider the claim elements individually and as an ordered combination to determine whether additional elements transform the claims into a patent-eligible application. *Id.* This search for an inventive concept seeks an element or combination of elements "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).

Recently, the PTO published guidance for evaluating subject matter eligibility. *See* 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (USPTO Jan. 7, 2019) ("Revised Guidance"). Under Step One, a determination is made whether the claims are in a statutory category of patentable subject matter, i.e., do they recite a process, machine, manufacture, or composition of matter, identified in 35 U.S.C. § 101. Revised Guidance, 84 Fed. Reg. at 50, 53–54; *see Alice*, 573 U.S. at 216; *Mayo*, 566 U.S. at 70.

Next, at Revised Step 2A, Prong One, an evaluation is made whether a claim recites a judicial exception, i.e., an abstract idea as set forth in Section I of the Revised Guidance, a law of nature, or a natural phenomenon. Revised Guidance, 84 Fed. Reg. at 54. To determine if a claim recites an abstract idea, specific limitations that recite an abstract idea must be identified (individually or in combination), and a determination made whether the limitation(s) fall(s) within one or more of the subject matter groupings in Section I of the Revised Guidance. *Id.* (*A. Revised Step 2A*). The three groupings are (1) mathematical concepts, relationships, formulas, or calculations, (2) certain methods of organizing human activity, including fundamental economic principles and practices, commercial

interactions, managing personal behavior, relationships, or interactions, and (3) mental processes and concepts formed in the human mind. *Id.* at 52.

If a claim recites a judicial exception, Prong Two of Revised Step 2A requires a determination to be made whether the claim as a whole integrates the judicial exception into a practical application. *Id.* "A claim that integrates a judicial exception into a practical application will 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." *Id.* at 53. If a judicial exception is integrated, the claim is patent eligible. *See id.* at 54–55.

If a claim does not "integrate" a recited judicial exception, the claim is directed to the judicial exception and further analysis is required under Step 2B to determine whether the claim contains additional elements, considered individually or in combination, that provide an inventive concept, such that the additional elements amount to significantly more than the exception itself. *Id.* at 56.

Step One: Does Claim 24 Fall within a Statutory Category of § 101?

Appellant argues independent claims 24, 34, and 43 as a group. Appeal Br. 6–15. We select claim 24 as representative of the issues that Appellant presents in the appeal, and claims 25–43 stand or fall with claim 24. 37 C.F.R. § 41.37(c)(1)(iv).

We examine whether claim 24 recites one of the enumerated statutory classes of subject matter, i.e., process, machine, manufacture, or composition of matter, eligible for patenting under 35 U.S.C. § 101. Claim 24 refers to "[a] method" including a series of operative steps, which recites one of the statutory classes (i.e., a process) under 35 U.S.C. § 101.

Step 2A, Prong One: Does Claim 24 Recite a Judicial Exception?

We next look to whether claim 24 recites any judicial exceptions, including certain groupings of abstract ideas, i.e., mathematical concepts, certain methods of organizing human activity, or mental processes.

The Examiner determines that claim 24 is directed to an abstract idea, specifically, a certain method of organizing human activity. Final Act. 3–5. The Examiner states that the method of organizing human activity involves managing personal behavior or relationships through claim steps involving "enabling . . . a user to interact within a virtual environment," "monitoring . . . at least one characteristic of the user within the virtual environment," "detecting . . . when the at least one characteristic of the user is below a predetermined threshold," "displaying . . . a first interactive rewarded playable unit, . . . wherein the user plays the first interactive rewarded playable unit," "activating . . . the first interactive rewarded playable unit in response to a request by the user to engage," and similar claim steps involving a "second interactive rewarded playable unit." Ans. 4–5 (emphasis omitted).

We agree that these claim steps detail a method of organizing human activity. The claimed invention was developed in recognition of "[p]layers [] engaging with games in new ways and [] seeking experiences" not previously available, and the need for "new ways to attract players who are willing to provide revenue and encourage players to undertake revenue-generating activities." Spec. ¶¶ 4, 6. Claim steps resulting in the attraction and encouragement of players is, indeed, the organization of human activity or behavior. The particular claim steps highlighted by the Examiner, although they stop short of including outcome-determinative rules, provide a

roadmap or rules by which a player navigates or is navigated through a first virtual environment having first and second interactive rewarded playable units, i.e., games, as well as providing for additional measurable units, or rewards, for certain unspecified achievements in playing the games.

Appellant takes issue with the Examiner's inclusion of the claim steps involving "at least the detecting, displaying, and activating steps," and their associated "wherein" clauses, as being considered part of the abstract idea in the form of a certain method of organizing human behavior. Reply Br. 2. Although those terms, read in a vacuum, might not immediately convey that they have any effect on human behavior, Appellant fails to account for the fact that those steps, as claimed in full, are all performed by a computer processor for the express purpose of influencing how and in what manner a human/user interacts with the playable units or games. We do not find error in the Examiner's consideration of these steps as contributing to the overall method of organizing or managing personal behavior.

Managing personal behavior falls within the abstract idea exception subgrouping of certain methods of organizing human activity. Revised Guidance, 84 Fed. Reg. at 52. Thus, claim 24 recites at least a method of managing personal behavior which is one of certain methods of organizing human activity identified in the Revised Guidance, and, thus, an abstract idea. We note that "performance of a claim limitation using generic computer components does not necessarily preclude the claim limitation from being in the . . . certain methods of organizing human activity grouping, *Alice*, 573 U.S. at 219–20." *See* Revised Guidance, 84 Fed. Reg. at 52 n.14.

Step 2A, Prong Two: Does Claim 24 Recite Additional Elements that Integrate the Judicial Exception into a Practical Application?

Following the Revised Guidance, having found that claim 24 recites a judicial exception, we next determine whether the claim recites "additional elements that integrate the exception into a practical application" (*see* MPEP §§ 2106.05(a)–(c), (e)–(h)). *See* Revised Guidance, 84 Fed. Reg. at 54.

The preamble of claim 24 recites "[a] method using at least one computer processor." Appeal Br. 17 (Claims App.) The body of claim 24 recites the computer processor, first and second virtual environments that may be in the form of modules, and, inferentially, a display as a user interface, in a generic manner. The Examiner specifically finds that these potential additional elements fail to meet the criteria in the various subsections of MPEP § 2106.05, and they otherwise do not implicate a particular machine, but only generic components. Ans. 6–7.

Appellant argues that, even if an abstract idea is recited, the claims integrate the abstract idea into a practical application that improves computer-implemented technology related to virtual environments, in that "[t]he claimed approach . . . allows a user to engage with first and second interactive rewarded playable units to generate measureable units for use in a virtual environment, thereby enhancing the user's experience and/or condition in the virtual environment." Appeal Br. 7–8. This argument fails to identify any improvement in computer-implemented technology; instead the improvement, if any, lies in an enhanced user experience that forms part of the abstract idea of managing human behavior itself.

Appellant likens claim 24 to the claims at issue in *DDR Holdings*,[3] in which "the claimed solution [was] necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." Appeal Br. 8. Appellant maintains that "the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer-generated virtual environments." *Id.* Claim 24 does not, however, address any problem existing with the generation and presenting of a virtual environment. The Specification evidences that the "main game" and the "support game" that correspond to the claimed first and second virtual environments are of several to many types of already existing virtual environments. Spec. ¶¶ 40, 42. The so-called "problem," as noted above, is how to attract players willing to spend money, and then encouraging them to undertake revenue-generating experiences. *Id.* at ¶¶ 6, 44. The solution is a method that influences or manages the activity of the user so as to generate that revenue.

Appellant further argues that,

> like *Enfish*,[4] where the claims describe a specific improvement to the way computers operate through the use of a self-referential table, the instant claims describe a specific improvement to the way computers operate through the use of interactive rewarded playable units that generate measurable units for use within a virtual environment.

Appeal Br. 10. However, neither the claim language nor any description in the Specification evidences that any improvement is brought about by the

[3] *DDR Holdings v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014).
[4] *Enfish LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016).

claimed invention in the operation of the computer on which the method is practiced.

Appellant also asserts that "the claimed implementation of the interactive rewarded playable units was not previously performable on a computer, and the claimed approach therefore represents an improvement in computer functionality." Reply Br. 3, citing *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016); *see also,* Appeal Br. 10–11. Appellant does not point to any evidence in support of this assertion, and our review of the Specification leads us to conclude the opposite, i.e., that the interactive rewarded playable units in the form of a main game and support game, are simply resident on the claimed processor, or, in described embodiments, on one or more main game servers and game servers of one or more support game providers. Spec. ¶ 56; Fig. 1. No mention is made as to any aspect of the interactive rewarded playable units that allow them to be performed on a computer, where they previously could not. More importantly, no language appearing in claim 24 states or infers an aspect of the interactive rewarded playable units that brings about such a result.

In short, the additional elements discussed above: (1) are not applied with any particular machine; (2) do not improve the functioning of a computer or other technology; (3) do not effect a transformation of a particular article to a different state; and (4) are not applied in any meaningful way beyond generally linking the use of the judicial exception to a particular technological environment. *See* MPEP §§ 2106.05(a)–(c), (e)–(h). Consequently, the claimed invention does not integrate the abstract idea into a "practical application." Thus, claim 24 is directed to an abstract idea,

which is a judicial exception to patent eligible subject matter under 35 U.S.C. § 101.

Step 2B: Does Claim 24 Recite an Inventive Concept?

We next consider whether claim 24 recites any elements, individually or as an ordered combination, that transform the abstract idea into a patent-eligible application, *e.g.*, by providing an inventive concept. *Alice*, 573 U.S. at 217–18. The Revised Guidance similarly states, under Step 2B, "examiners should . . . evaluate the additional elements individually and in combination . . . to determine whether they provide an inventive concept (*i.e.*, whether the additional elements amount to significantly more than the exception itself)." 84 Fed. Reg. at 56.

The Examiner finds that:

> The additional element(s) or combination of elements in the claim(s) other than the abstract idea(s) per se including a computer processor, displaying(implying the inclusion of a display that is not otherwise positively recited) and a server computer, support provider computers, a computer readable medium as respectively presented amount(s) to no more than: (i) mere instructions to implement the idea on a computer, and/or (ii) recitation of generic computer structures that serves to perform generic computer functions that are well understood, routine, and conventional activities previously known to the pertinent industry per the Appellant's description (Appellant's specification Paragraphs [0038], [0039], [0149]-[0155]). Viewed as a whole, these additional claim element(s) do not provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself.

Ans. 7.

Appellant responds that claim 24 amounts to significantly more than the claimed judicial exception, in that,

> by displaying the second interactive rewarded playable unit within at least a portion of the first interactive rewarded playable unit, *the user is more likely to engage in the second interactive rewarded playable unit*, given that the user is already in the mode of engaging with such units. Additionally, use of the predictive model ensures that the second interactive rewarded playable unit can be customized according to the user. In other words, the predictive model is used to configure a probability for the second interactive rewarded playable unit, as recited in the independent claims. This ensures that user history can be taken into consideration when the second rewarded playable unit is activated for the user. In general, the claimed use of the predictive model improves the ability of the computer to configure the second interactive rewarded playable unit and represents an improvement to the function of the computer itself.

Appeal Br. 12 (emphasis added).

The italicized phrase in the above quote is indicative that Appellant's arguments revolve around aspects of the judicial exception itself, and not elements, considered individually and as a whole, that transform the judicial exception into an inventive concept. Similarly, the discussion of the predictive model as being customizable for individual users based on user history is not transformative, but instead is an aspect of the judicial exception itself, in that the Specification evidences that this modeling is for the purpose of "generat[ing] recommendations and/or control[ling] the support game as to encourage revenue generation," employing user histories "in order to develop a model of behavior for revenue generation," and using the model "to base determinations of what to offer the players, when the offer should be made, the chances of success and so forth in order to increase revenue generation." Spec. ¶¶ 119, 124.

Appellant points to portions of the abstract idea itself—a certain method of organizing human activity that involves managing personal behavior—rather than only pointing to *additional* elements that ensure that the claim is more than the judicial exception. *See* Revised Guidance, 84 Fed. Reg. at 56 (instructing that *additional* element(s) should be evaluated to determine whether they (a) add specific limitations that are not well-understood, routine, and conventional in the field, or (2) simply append well-understood, routine, and conventional activities previously known to the industry (citing MPEP § 2106.05(d)). *See Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (citing *Mayo*, 566 U.S. at 90) (a finding that the claims are novel and nonobvious in light of an absence of evidence does not conflict with the Examiner's conclusion under 35 U.S.C. § 101 because "a claim for a *new* abstract idea is still an abstract idea"); *see also Trading Techs. Int'l v. IBG LLC*, 921 F.3d at 1093 ("The abstract idea itself cannot supply the inventive concept, 'no matter how groundbreaking the advance.'") (quoting *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1171 (Fed. Cir. 2018)).

Claim 24 "simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception." *See* Revised Guidance, 84 Fed. Reg. at 56. For the reasons discussed above, we find no element or combination of elements recited in claim 24 that contain any "inventive concept" or add anything "significantly more" to transform the abstract concept into a patent-eligible application. *Alice*, 573 U.S. at 221.

For these reasons, we find no error in the Examiner's rejection of claims 24–43 under 35 U.S.C. § 101.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
24–43	101	Eligibility	24–43	

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