UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/655,978	10/19/2012	Anthony W. Humay	TONYP101USA	3763

23623 7590 03/22/2019

AMIN, TUROCY & WATSON, LLP
200 Park Avenue
Suite 300
Beachwood, OH 44122

EXAMINER
NGUYEN, NGA B

ART UNIT	PAPER NUMBER
3683	

NOTIFICATION DATE	DELIVERY MODE
03/22/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

hmckee@thepatentattorneys.com
rveri@thepatentattorneys.com
docket@thepatentattorneys.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ANTHONY W. HUMAY

Appeal 2017-010390
Application 13/655,978
Technology Center 3600

Before ST. JOHN COURTENAY III, ERIC S. FRAHM, and JOYCE CRAIG, *Administrative Patent Judges*.

CRAIG, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–25, which are all of the claims pending in this application.[2] We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

---

[1] According to Appellant, the real party in interest is ANTHONY W. HUMAY, the named inventor. App. Br. 3.

[2] Claim 26 has been canceled. App. Br. 45 (Claims App'x).

INVENTION

Appellant's invention relates to a polling platform. *See* Abstract. Claim 1 is illustrative and reads as follows:

1. A polling system, comprising:

a memory to store computer-executable components; and

a processor communicatively coupled to the memory that facilitates execution of the computer-executable components, the computer-executable components, comprising:

a poll creation component configured to create a targeted poll based at least in part on an attribute associated with poll targeting, wherein the attribute associated with poll targeting is related to information concerning a potential respondent;

a poll execution component configured to determine the information concerning the potential respondent based at least in part on a predetermined spatial interval between a space attribute associated with poll targeting and a space characteristic associated with the potential respondent, wherein the poll execution component is further configured to present the targeted poll to the potential respondent based at least in part on a determination that the attribute associated with poll targeting is fulfilled for the potential respondent and that the space characteristic associated with the potential respondent satisfies the predetermined spatial interval between the space attribute and the space characteristic;

a rewards component configured to award, to the potential respondent, a reward for responding to the targeted poll based at least in part on sponsorship of the targeted poll by a poll sponsor and the space characteristic associated with the potential respondent;

an analysis component that analyzes aggregate results from multiple respondents, comprising the potential respondent, to the targeted poll to form a results report for the targeted poll; and

a social component configured to allow the potential respondent to share the targeted poll, and a trend represented by the results from the multiple respondents with at least one other potential respondent associated with at least one of the polling system or a social networking system,

wherein the poll execution component is further configured to enable searching of polls based on keyword input to find polls of interest in a result set, and to enable subscription to selected ones of the polls of interest from the result set in order to receive respective results reports from the selected ones of the polls of interest,

wherein the poll execution component is further configured to determine the information concerning the potential respondent based at least in part on a predetermined interval between a time attribute associated with poll targeting and a time characteristic associated with the potential respondent,

wherein the poll execution component is further configured to subsequently present the targeted poll to the potential respondent based at least in part on the determination that the attribute associated with poll targeting is fulfilled for the potential respondent and that the time characteristic associated with the potential respondent satisfies the predetermined interval between the time attribute and the time characteristic, and

wherein the rewards component is further configured to award to the potential respondent, a disparate reward for subsequently responding to the targeted poll based at least in part on the space characteristic associated with the potential respondent and the time characteristic associated with the potential respondent.

REJECTION

Claims 1–25 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to a judicial exception to patent-eligible subject matter, without significantly more.

ANALYSIS

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 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. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (brackets in original) (citing *Diamond v. Diehr*, 450 U.S. 175, 185 (1981)). In determining whether a claim falls within an excluded category, we are guided by the Supreme Court's two-step framework, described in *Mayo* and *Alice*. *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 217–18 (2014) (citing *May*, 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, 69 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as "molding . . . rubber products" (*Diamond v. Diehr*, 450 U.S. 175, 192–93 (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 (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 Supreme 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 Supreme 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.* (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 (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.* (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.*

The PTO recently published revised guidance on the application of § 101. USPTO's January 7, 2019 Memorandum, 84 Fed. Reg. 50, 2019 Revised Patent Subject Matter Eligibility Guidance ("2019 Guidance"). Under that guidance, 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); and
>
> (2) additional elements that integrate the judicial exception into a practical application ("Prong Two") (*see* MPEP § 2106.05(a)–(c), (e)–(h)) (9th ed. 2018).

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 are 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.

See 2019 Guidance.

Here, the Examiner concluded the claims are abstract because they are directed to "polling," which can be performed mentally. *See* Final Act. 4.

Appellant contends the Examiner erred because:

> 1) it is unfair to classify the subject claims as the abstract idea of 'polling', 2) the subject claims go significantly beyond the

> abstract idea of 'polling' as can be plainly observed from the claim language, 3) the risk of preemption of all 'polling' by the subject claims is non-existent, and 4) the subject claims solve significant issues in the polling space and are novel and non-obvious over other electronic polling systems.

App. Br. 16.

Step 2A, Prong One – Recited Judicial Exception

Step 2A of the 2019 Guidance is a two-prong inquiry. In Prong One we evaluate whether the claim recites a judicial exception. Under Supreme Court precedent, claims directed purely to an abstract idea are patent ineligible. As set forth in the 2019 Guidance, which extracts and synthesizes key concepts identified by the courts, abstract ideas include (1) mathematical concepts, (2) certain methods of organizing human activity, and (3) mental processes. Among those mental processes identified in the 2019 Guidance are concepts performed in the human mind, such as observation, evaluation, judgment, and opinion. In addition, the Federal Circuit has concluded that claims to the mental process of "translating a functional description of a logic circuit into a hardware component description of the logic circuit" are directed to an abstract idea because the claims "read on an individual performing the claimed steps mentally or with pencil and paper." *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1149–50 (Fed. Cir. 2016); *see also Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)) (noting that the claimed "conversion of [binary-coded decimal] numerals to pure binary numerals can be done mentally," i.e., "as a person would do it by head and hand.").

Like those concepts, claim 1 recites mental processes that practically could be performed via pen and paper or in a person's mind:

[a poll creation component configured to] *create a targeted poll based at least in part on an attribute associated with poll targeting, wherein the attribute associated with poll targeting is related to information concerning a potential respondent*;

[a poll execution component configured to] *determine the information concerning the potential respondent based at least in part on a predetermined spatial interval between a space attribute associated with poll targeting and a space characteristic associated with the potential respondent, [wherein the poll execution component is further configured to] present the targeted poll to the potential respondent based at least in part on a determination that the attribute associated with poll targeting is fulfilled for the potential respondent and that the space characteristic associated with the potential respondent satisfies the predetermined spatial interval between the space attribute and the space characteristic*;

[a rewards component configured to] *award, to the potential respondent, a reward for responding to the targeted poll based at least in part on sponsorship of the targeted poll by a poll sponsor and the space characteristic associated with the potential respondent*;

[an analysis component that] *analyze[s] aggregate results from multiple respondents, comprising the potential respondent, to the targeted poll to form a results report for the targeted poll*; and

[a social component configured to] *allow the potential respondent to share the targeted poll, and a trend represented by the results from the multiple respondents with at least one other potential respondent associated with at least one of the polling system or a social networking system,*

[wherein the poll execution component is further configured to] *enable searching of polls based on keyword input to find polls of interest in a result set, and [to] enable subscription to selected ones of the polls of interest from the result set in order*

> *to receive respective results reports from the selected ones of the polls of interest,*
>
> [wherein the poll execution component is further configured to] *determine the information concerning the potential respondent based at least in part on a predetermined interval between a time attribute associated with poll targeting and a time characteristic associated with the potential respondent,*
>
> [wherein the poll execution component is further configured to] *subsequently present the targeted poll to the potential respondent based at least in part on the determination that the attribute associated with poll targeting is fulfilled for the potential respondent and that the time characteristic associated with the potential respondent satisfies the predetermined interval between the time attribute and the time characteristic,* and
>
> [wherein the rewards component is further configured to] *award to the potential respondent, a disparate reward for subsequently responding to the targeted poll based at least in part on the space characteristic associated with the potential respondent and the time characteristic associated with the potential respondent.*

App. Br. 32–33 (Claims App'x). Similar limitations are recited in claims 14, 21, and 25.

The "*create*" limitation practically could be performed via pen and paper or in a person's mind. Because the claim does not limit the complexity of either the "*targeted poll*" or the "*attribute associated with poll targeting*," a person with pen and paper could create a written targeted poll.

A person with pen and paper could also "*determine the information concerning the potential respondent based at least in part on a predetermined spatial interval between a space attribute associated with poll targeting and a space characteristic associated with the potential respondent.*" The Specification provides an example of a "*predetermined*

spacial interval" being determined by comparing location information associated with a user or subscriber with that of a receiver. *See* Spec. ¶ 123. The limitation is recited as "*predetermined*," but such spatial interval could also be compared mentally. *See* Spec. ¶ 40.

A person with pen and paper could "*present the targeted poll to the potential respondent based at least in part on a determination that the attribute associated with poll targeting is fulfilled for the potential respondent and that the space characteristic associated with the potential respondent satisfies the predetermined spatial interval between the space attribute and the space characteristic*," for example, by showing the piece of paper on which the targeted poll was created to potential respondents.

A person with pen and paper could also "*award, to the potential respondent, a reward for responding to the targeted poll based at least in part on sponsorship of the targeted poll by a poll sponsor and the space characteristic associated with the potential respondent*" by noting the reward with pen on paper and awarding it to the potential respondent, for example.

A person with pen and paper could "*analyze[] aggregate results from multiple respondents, comprising the potential respondent, to the targeted poll to form a results report for the targeted poll.*" The person with pen and paper could also "*share the targeted poll, and a trend represented by the results from the multiple respondents with at least one other potential respondent associated with at least one of the polling system or a social networking system.*" For example, the written polling report could be given to another potential respondent, who is associated with the polling system or social networking system.

A person with pen and paper could "*enable searching of polls based on keyword input to find polls of interest in a result set*," by writing keywords on the polls. Similarly, a person with pen and paper could "*enable subscription to selected ones of the polls of interest from the result set in order to receive respective results reports from the selected ones of the polls of interest*," again by notation of who wants to receive respective results reports.

Similarly, one with pen and paper could "*determine the information concerning the potential respondent based at least in part on a predetermined interval between a time attribute associated with poll targeting and a time characteristic associated with the potential respondent*." The Specification describes "*a predetermined interval*" as "within an interval of when data and/or information was last updated," for example. *See* Spec. ¶ 40.

A person with pen and paper could also perform the "*subsequently present*" and final "*award*" limitations for the reasons discussed above with regard to the "*present*" and "*award*" limitations.

We are not persuaded by Appellant's argument that "actual data is created, managed, executed, and tied to social networking platforms with the subject application in a complex way that does not simply embody the abstract idea of 'polling,' and cannot be carried out in a mall with a clipboard." *See* App. Br. 17. The plain language of claim 1 does not require tying data to a social networking platform, as Appellant alleges. Rather, the claim recites allowing a potential respondent to share a targeted poll and a trend with another potential respondent "associated with at least one of the polling system or a social networking system." App. Br. 33.

Because we conclude the independent claims recite an abstract idea of a mental process, we proceed to Prong Two to determine whether the claims are "directed to" the judicial exception.

Step 2A, Prong Two – Practical Application

If a claim recites a judicial exception, in Prong Two we determine whether the recited judicial exception is integrated into a practical application of that exception by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application. If the recited judicial exception is integrated into a practical application, the claim is not directed to the judicial exception.

Here, claim 1 recites the additional elements of "a memory to store computer-executable components," "a processor communicatively coupled to the memory that facilitates execution of the computer-executable components," and "computer-executable components" ("poll creation," "poll execution," "rewards," "analysis," and "social"). App. Br. 32–33 (Claims App'x). Claim 14 recites an additional element of "a system comprising a processor"; claim 21 recites "[a] non-transitory computer readable storage medium" and "a computing device including a processor"; and claim 25 recites "a device comprising a processor." *Id.* at 37–39, 41–42, 44–45.

Considering claim 1 as a whole, none of the additional elements applies or uses the abstract idea in a meaningful way such that the claim as a whole is more than a drafting effort designed to monopolize the exception.

For the reasons set forth by the Examiner, we are not persuaded by Appellant's arguments that claim 1 improves the functioning of the

computer itself or any other technology or technical field. *See* Ans. 16–17; MPEP § 2106.05(a). In reviewing the record, we find the claims on appeal are silent regarding specific limitations directed to an improved computer system, processor, memory, network, database, or Internet. Therefore, we find Appellant's claimed invention does not provide a solution "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks," such as considered by the court in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014) (emphasis added).

Regarding any purported transformation of data performed by Appellant's claims, our reviewing court guides: "[t]he mere manipulation or reorganization of data, however, does not satisfy the transformation prong." *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011). Therefore, we conclude Appellant's computer-implemented method claims 14–20 fail to satisfy the transformation prong of the *Bilski* machine-or-transformation test. *See* MPEP § 2106.05(c) "Particular Transformation." Appellant does not argue that the method claims on appeal are tied to a particular machine. *See* MPEP § 2106.05(b) "Particular Machine." Nor does Appellant present arguments regarding MPEP § 2106.05(e) "Other Meaningful Limitations."

For the reasons discussed above, we conclude Appellant's claims invoke generic computer components merely as a tool in which the computer instructions apply the judicial exception and, thus, the abstract idea is not integrated into a practical application. Claims 14, 21, and 25 similarly do not integrate the abstract idea into a practical application.

Step 2B – Inventive Concept

Having determined the independent claims are directed to an abstract idea that is not integrated into a practical application, we now evaluate whether the additional elements add a specific limitation that is not well-understood, routine, or conventional activity in the field, or simply append well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the abstract idea. *See* 2019 Guidance.

Here, the Examiner determined, and we agree, that the only elements beyond the abstract idea are generic computer components used to perform generic computer functions (Ans. 16–17) —a determination that is supported by Appellant's Specification (*see, e.g.*, Spec. ¶¶ 122, 220–223). Appellant's Specification, for example, describes "memory" and "computer readable storage medium" as including the broad categories of volatile and nonvolatile memory, without describing the particulars. Spec. ¶ 220; *see also* Spec. ¶ 223. The Specification also describes the terms "device," "component," and "system" as "intended to refer to a computer-related entity, either hardware, a combination of hardware and software, software, or software in execution," without describing the particulars. *Id.* ¶ 221. The Specification describes that any of the described components "can be configured to perform the described functionality (e.g., via computer-executable instructions stored in a tangible computer readable medium, and/or executed by a computer, a processor, etc.)," without describing the particulars. *See, e.g.*, *id.* ¶ 122. The Specification further describes that "various modifications, alterations, addition, and/or deletions can be made

without departing from the scope of the embodiments as described" in the Specification. *Id.* ¶ 222.

The Federal Circuit, in accordance with *Alice*, has "repeatedly recognized the absence of a genuine dispute as to eligibility" where claims have been defended as involving an inventive concept based "merely on the idea of using existing computers or the Internet to carry out conventional processes, with no alteration of computer functionality." *Berkheimer v. HP Inc.*, 890 F.3d 1369, 1373 (Fed. Cir. 2018) (Moore, J., concurring).

For these reasons, we determine the claims do not recite an inventive concept because they simply append well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the abstract idea.

Novelty/Nonobviousness

Appellant argues that a finding that claims are novel and nonobvious is a factor that weighs in support of patentability. *See* App. Br. 18.

We disagree. The Supreme Court guides: "[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." *Diehr*, 450 U.S. at 188–89. Our reviewing court further emphasizes that "[e]ligibility and novelty are separate inquiries." *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1340 (Fed. Cir. 2017) (citing *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1263 (Fed. Cir. 2016)) (holding that "[e]ven assuming" that a particular claimed feature was novel does not "avoid the problem of abstractness").

Preemption

Appellant's argument that the claims pose no risk of preempting an abstract idea is also not persuasive. *See* App. Br. 20. Preemption is not the sole test for patent eligibility, and any questions on preemption in the instant case have been resolved by the Examiner's *Alice* analysis. As our reviewing court has explained: "questions on preemption are inherent in and resolved by the § 101 analysis," and, although "preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015); *cf. OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) ("[T]hat the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract.").

For these reasons, we are not persuaded that the Examiner erred in rejecting claims 1–25 under § 101.

Accordingly, we affirm the Examiner's § 101 rejection of independent claim 1, as well as the Examiner's § 101 rejection of independent claims 14, 21, and 25, which Appellant argues are patentable for similar reasons. App. Br. 31. We also sustain the Examiner's rejection of dependent claims 2–13, 15–20, and 22–24, not argued separately with particularity. *Id.*

DECISION

We affirm the Examiner's decision rejecting claims 1–25.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv). *See* 37 C.F.R. § 41.50(f).

AFFIRMED