



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.
14/016,220	09/02/2013	Michael Bigby	12729/1166 (Y00171US02)	6036
56020	7590	08/22/2017	EXAMINER	
BGL/Yahoo Holdings P.O. BOX 10395 CHICAGO, IL 60610			GARTLAND, SCOTT D	
			ART UNIT	PAPER NUMBER
			3622	
			MAIL DATE	DELIVERY MODE
			08/22/2017	PAPER

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.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MICHAEL BIGBY, BRITTON GLASSER, ADAM TAISCH,
ANDY ATHERTON, and HARRY FUNG

Appeal 2016-003726
Application 14/016,220
Technology Center 3600

Before CAROLYN D. THOMAS, BRUCE R. WINSOR, and
MICHAEL ENGLE, *Administrative Patent Judges*.

THOMAS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants seek our review under 35 U.S.C. § 134(a) of the Examiner's Final Rejection of claims 1–17, all the pending claims in the present application. Claims 18–20 are withdrawn. *See* Spec. 10–13, Claim Appendix. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We AFFIRM.

The present invention relates generally to scheduling advertising. *See* Abstract.

Claim 1 is illustrative:

1. A computer-implemented method for scheduling advertisements comprising:
 - receiving a plurality of advertising contracts that are each associated with a time interval;
 - determining a click through rate for each of the plurality of advertising contracts;
 - determining a conversion rate for each of the plurality of advertising contracts;
 - estimating, with at least one processor, a value per impression that is based on the determined click through rate and the determined conversion rate multiplied by a conversion bounty, wherein the conversion bounty comprises a dollar amount per impression;
 - calculating, with the at least one processor, a number of clicks based on the determined click through rate and a weight assigned to future time intervals that is based on an estimated relative traffic pattern for each future time interval; and
 - scheduling the advertisements based on the estimated value per impression and the calculated number of clicks in the future time intervals.

Appellants appeal the following rejection:¹

Claims 1–17 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter (Final Act. 5–6).

¹ The Examiner withdrew (1) the rejections under 35 U.S.C. § 112, second paragraph (Final Act. 4) and (2) the Double Patenting rejection, due to the filing of a Terminal Disclaimer on April 29, 2015 (Ans. 2). As discussed below, the Examiner also highlights that “there is no rejection related to provisional support” regarding Provisional Application No. 60/507,031, and that this issue “does not appear to be appealable” (*id.*).

ANALYSIS

Priority to Provisional Application

Appellants “disagree with the Final Office Action’s suggestion that the Provisional Application (“Provisional”) ‘provides no support for the concept of weighting, not Fig. 3–6 and their respective discussions’” (App. Br. 3). In response, the Examiner highlights “that there is no rejection related to provisional support; therefore, the issue does not appear to be appealable” (*see* Ans. 2). Therefore, we shall treat the Examiner’s discussion regarding support in the Provisional Application as an “objection,” a non-appealable matter.

Ordinarily an objection is petitionable to the Director whereas a rejection is appealable to the Board. *See* 37 C.F.R. § 1.181 (“Petition may be taken to the Director . . . [f]rom any action or requirement . . . which is not subject to appeal to the Patent Trial and Appeal Board or to the court”). Appellants have not established that the Examiner’s determination that the “Provisional Application No. 60/507,031 provides no support for the concept of weighting” necessitates our resolution of the “objection” as an appealable matter as part of this appeal. Accordingly, we do not reach this objection because it is a matter that is not properly raised before us for resolution as part of this appeal.

Rejection under § 101

With respect to independent method claim 1, and similarly, computer-readable medium claim 11, the Examiner finds that these claims are directed to an abstract idea of “scheduling advertisements based on ad responses and future impression availabilities” (Final Act. 5). The Examiner further finds that “[t]he claims do not include limitations that are ‘significantly more’ than

the abstract idea because the claims do not include improvements to another technology or technical field” and “the limitations in the instant claims are done by the generically recited computer” (*id.*).

Appellants contend that “the Final Action fails to articulate how the claimed invention is an abstract idea” (App. Br. 4) and “[t]he advertisement scheduling, determinations, estimates, and calculations as claimed are not ‘a fundamental economic practice’ or a ‘building block of the modern economy’” (*id.* at 5).

We disagree with Appellants’ contentions. Instead, we find that the Examiner has provided a sufficient response supported by a preponderance of evidence (Ans. 4–12). As such, we refer to, rely on, and adopt the Examiner’s findings and conclusions set forth in the Answer. Our discussions here will be limited to the following points of emphasis.

A patent may be obtained for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101. The Supreme Court has held that 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*, 134 S. Ct. 2347, 2354 (2014); *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (“Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.”). Notwithstanding, that a law of nature or an abstract idea, by itself, is not patentable, the application of these concepts may be deserving of patent protection. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293–94 (2012). In *Mayo*, the Court stated that “to transform an unpatentable law of nature into a patent

eligible *application* of such a law, one must do more than simply state the law of nature while adding the words ‘apply it.’” *Id.* at 1294 (citation omitted).

In *Alice*, the Court reaffirmed the framework set forth previously in *Mayo* “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of these concepts.” *Alice*, 134 S. Ct. at 2355. The first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are directed to a patent-ineligible concept, then the second step in the analysis is to consider the elements of the claims “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 132 S. Ct. at 1298, 1297).

In other words, the second step is to “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.’” *Id.* (brackets and quotation marks omitted) (quoting *Mayo*, 132 S. Ct. at 1294). The prohibition against patenting an abstract idea “cannot be circumvented by attempting to limit the use of the formula to a particular technological environment or adding insignificant post-solution activity.” *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010) (quotations omitted). The Court in *Alice* noted that “[s]imply appending conventional steps, specified at a high level of generality, was not ‘enough’ [in *Mayo*] to supply an ‘inventive concept.’” *Alice*, 134 S. Ct. at 2357 (quoting *Mayo*, 132 S. Ct. at 1300, 1297, 1294).

Step one: Are the claims at issue directed to a patent-ineligible concept?

Claim 1 recites six steps: (a) receiving; (b) determining a click through rate; (c) determining a conversion rate; (d) estimating; (e) calculating; and (f) scheduling. Each of these steps involves either information or a calculation. For example, advertising contract information associated with a time interval is received. A click through rate and a conversion rate is determined for each advertising contract. A value per impression is estimated. The number of clicks is calculated and advertisements are scheduled. This is the essence of the abstract concept of scheduling advertisements based on ad responses and future impressions availabilities (*see* Ans. 6).

We agree with the Examiner that Appellants' claims are directed to an abstract idea of "scheduling advertisements based on ad responses and future impression availabilities" (Final Act. 5), i.e., receiving, determining, estimating, calculating, and scheduling information. Information collection and analysis, including when limited to particular content, is within the realm of abstract ideas. *See, e.g., Elec. Power Grp. LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (holding that "collecting information, analyzing it, and displaying certain results of the collection and analysis" are "a familiar class of claims 'directed to' a patent-ineligible concept"); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016); *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1349 (Fed. Cir. 2015); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011).

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

With respect to whether the claim elements, individually or collectively, add significantly more than the abstract idea, the Examiner finds that “applying the abstract idea by use of a computer is not considered a significant improvement” (Ans. 7) and that “Appellant’s claims [] merely apply a mathematical formula to the field-of-use of scheduling advertising” (*id.* at 8). We agree with the Examiner.

“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.’” *Alice*, 134 S. Ct. at 2357 (brackets omitted) (quoting *Mayo*, 132 S. Ct. at 1297). The prohibition against patenting an abstract idea “cannot be circumvented by attempting to limit the use of the formula to a particular technological environment or adding insignificant post-solution activity.” *Bilski*, 561 U.S. at 610–11 (quotations omitted). The recitations in claim 1 pertaining to *with at least one processor* are analogous to the recitation of a conventional “computer” discussed in *Alice*.

Appellants contend that “the instant claims are not well-understood, routine and conventional activities previously known to the industry” because “there are no prior art rejections for the claimed activities” (App. Br. 8). In response, the Examiner finds, and we agree, that “[t]he *Alice* Court does not appear to conflate 102 or 103 analysis with the 101 analysis they perform, the Court appears to merely use cited references to illustrate the idea” (Ans. 5).

Whether a rejection under §§ 102 or 103 has been issued is not the test for determining patent-eligible subject matter under § 101. *See Diamond v.*

Diehr, 450 U.S. 175, 188–89 (1981) (“The ‘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.”). The Supreme Court has set forth in *Alice* the proper two step framework for distinguishing patents that claim abstract ideas. Appellants’ contention above that the Examiner has found no prior art references that teach or suggest all of the claimed features does not apprise us of error in the rejection under 35 U.S.C. § 101. An abstract idea does not transform into an inventive concept just because the prior art does not disclose or suggest it.²

Appellants further contend that the “claims are akin to the patent eligible claims in *DDR Holdings*”³ because “[t]he presently pending claims overcome technical problems related to electronic advertisement scheduling and estimating future electronic advertisement value” and “[t]he presently-solved problem . . . arises solely in an online computing network context” (App. Br. 7; *see also* Reply Br. 3–5). The Examiner finds, and we agree, that “the instant claims exhibit no similar characteristics [to the claims in *DDR Holdings*] – there is no change in function of the computer or computer technology” (Ans. 11).

Specifically, Appellants’ claims 1–17 are not rooted in computer technology as outlined in *DDR Holdings* nor do they seek to improve any type of computer capabilities, such as a “self-referential table for a computer database” outlined in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336–

² *Alice* also confirmed that if a patent’s systems claims are no different in substance from its method claims, they will rise and fall together. 134 S. Ct. at 2360. The same was true of the *Alice* patent’s media claims. *Id.*

³ *DDR Holdings, LLC v. Hotels.com L.P.*, 773 F.3d 1245 (Fed. Cir. 2014).

37 (Fed. Cir. 2016). Instead, Appellants’ claims 1–17 simply recite an abstract concept of “scheduling advertisements based on ad responses and future impression availabilities” (Final Act. 5), i.e., collecting, analyzing, and scheduling information. We agree with the Examiner that “[a]lthough the instant claims are related to the more modern medium of computer advertising, the same problem of assessing or estimating values to schedule advertising” existed when “contracting for placement in a newspaper, magazine, journal, or other medium” (Ans. 9). “The Supreme Court and this court have repeatedly made clear that merely limiting the field of use of the abstract idea to a particular existing technological environment does not render the claims any less abstract.” *Affinity Labs of Texas, LLC v. DirecTV, LLC*, 838 F.3d 1253, 1259 (Fed. Cir. 2016).

Additionally, as recognized by the Federal Circuit in *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014), *Bilski’s* “machine-or-transformation” (MoT) test can provide a “useful clue” in the second step of the *Alice* framework. *See Bilski*, 561 U.S. at 611. Under *Bilski’s* MoT test, a claimed process can be considered patent-eligible under § 101 if: (1) “it is tied to a particular machine or apparatus”; or (2) “it transforms a particular article into a different state or thing.” *In re Bilski*, 545 F.3d 943, 954 (Fed. Cir. 2008) (citing *Gottschalk*, 409 U.S. at 70), *aff’d*, 561 U.S. 593.

Claim 1 does not specify any particular entity that performs the recited “receiving,” “determining,” and “scheduling” steps, thus, such steps could be practiced mentally. Adding a mental step cannot patentably transform an otherwise abstract idea into an inventive concept. *In re Comiskey*, 554 F.3d 967, 979 (Fed. Cir. 2009) (“mental processes—or processes of human thinking—standing alone are not patentable even if they

have practical application”). As for the estimating and calculating steps, we agree with the Examiner that such steps are done by “no more than a generic computer” (Final Act. 5). We further agree with the Examiner that such a “series of math calculations that could be carried out by hand or in a person’s mind do not constitute significantly more, even if they are claimed to be performed through computer implementation” (Ans. 12).

As recognized by the Supreme Court, “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Alice*, 134 S. Ct. at 2359 (concluding claims “simply instruct[ing] the practitioner to implement the abstract idea of intermediated settlement on a generic computer” not patent eligible); *see also Ultramercial*, 772 F.3d at 715–16 (claims merely reciting abstract idea of using advertising as currency as applied to particular technological environment of the Internet not patent eligible); *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344–45 (Fed. Cir. 2013) (claims reciting “generalized software components arranged to implement an abstract concept [of generating insurance-policy-related tasks based on rules to be completed upon the occurrence of an event] on a computer” not patent eligible); *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333–34 (Fed. Cir. 2012) (“[s]imply adding a ‘computer aided’ limitation to a claim covering an abstract concept, without more, is insufficient to render [a] claim patent eligible” (internal citation omitted)).

Limiting such an abstract concept of “scheduling advertisements based on ad responses and future impression availabilities” to generic components, such as a processor, or to a field of use in online ads does not make the abstract concept patent-eligible under 35 U.S.C. § 101. Because

Appeal 2016-003726
Application 14/016,220

Appellants' independent claims 1 and 11 are directed to a patent-ineligible abstract concept and do not recite something "significantly more" under the second prong of the *Alice* analysis, we sustain the Examiner's rejection of these claims, as well as respective dependent claims 2–10 and 12–17, under 35 U.S.C. § 101 as being directed to non-statutory subject matter in light of *Alice* and its progeny.

DECISION

As such, we AFFIRM the Examiner's final rejections of claims 1–17 under 35 U.S.C. § 101.

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).

AFFIRMED