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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/270,615	10/11/2011	Margaret A. Strong	20110092/1100-110092	2677
105987	7590	03/30/2018	EXAMINER	
Sage Patent Group/CA P.O. Box 30789 Raleigh, NC 27622-0789			FRISBY, KESHA	
			ART UNIT	PAPER NUMBER
			3715	
			NOTIFICATION DATE	DELIVERY MODE
			03/30/2018	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MARGARET A. STRONG, WENDY K. HUGHES, and
SHANE D. GERSON

Appeal 2016-001641
Application 13/270,615¹
Technology Center 3700

Before JOHN C. KERINS, LEE L. STEPINA, and
RICHARD H. MARSCHALL, *Administrative Patent Judges*.

MARSCHALL, *Administrative Patent Judge*.

DECISION ON APPEAL

Margaret A. Strong et al. (Appellants) seek our review under 35 U.S.C. § 134 of the Examiner's final decision rejecting claims 1–25 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Final Act. 3.² We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Appellants identify CA, Inc. as the real party in interest. Appeal Br. 1.

² The Examiner initially rejected claims 1–25 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Final Act. 2. The Examiner withdrew that rejection prior to appeal. *See* Adv. Act. 1 (mailed April 30, 2015).

THE CLAIMED SUBJECT MATTER

Appellants' claimed subject matter relates "to a quantitative approach for analyzing/assessing technical communities." Spec. ¶ 1. Claims 1, 11, and 20 are independent. Claim 1, reproduced below, is illustrative of the claimed subject matter.

1. A method of assessing a technical community, the method comprising:

retrieving, from a database, a plurality of characteristics that each describe an aspect of the technical community, the technical community comprising a group of members that share expertise regarding a technical subject, wherein the plurality of characteristics are collectively used to assess the technical community;

identifying ones of the plurality of characteristics as corresponding to respective stages of a lifecycle of the technical community, wherein the lifecycle is defined by a model that is indicative of a projected path of progress and decline of the technical community;

retrieving, from the database, a plurality of categories that each indicate a condition of the technical community;

generating an interface that displays the plurality of characteristics as queries to be answered by a member of the technical community and the plurality of categories;

receiving an input for each characteristic, wherein each input comprises a quantitative input that provides, for a corresponding characteristic, a qualitative opinion of the member of the technical community with respect to at least one category associated with the technical community;

generating a score based on at least one input;

identifying a stage of the lifecycle of the technical community based on the score, wherein the score provides the assessment of the technical community at the stage of the lifecycle; and

determining a potential of the technical community to move to a more contributory stage of the lifecycle based on the score,

wherein the retrieving the characteristics, the identifying ones of the plurality of characteristics, the retrieving the categories, the generating the interface, the receiving the input, the generating the score, the identifying the stage, and the determining the potential comprise operations performed by one or more processors.

Appeal Br. 13 (Claims App.).

ANALYSIS

Legal Framework

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *See, e.g., Alice Corp. Pty Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 75–77 (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*, 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.* The “directed to” inquiry asks not whether “the claims *involve* a patent-ineligible concept,” but instead whether, “considered in light of the specification, . . . ‘their character as a whole is directed to excluded subject matter.’” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (internal

citations omitted). With respect to computer-enabled claimed subject matter, it is helpful to determine whether the claims at issue can readily be understood as simply adding conventional computer components to well-known business practices or not. *Id.* at 1338. In that regard, we determine whether the claims “focus on a specific means or method that improves the relevant technology” or are “directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016).

If the claims are directed to a patent-ineligible concept, 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.” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 79, 78). 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 in original) (quoting *Mayo*, 566 U.S. at 72–73).

Step One

Appellants argue “claims 1–25” or the “pending claims” as a group rather than separately argue the claims, or note distinctions between the claims. *See, e.g.*, Appeal Br. 4, 6–9, 11; Reply Br. 2–5. We will do the same here, and select claim 1 as representative when referring to specific claim limitations. 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner considered the claims “as a whole” and “considering all claim elements both individually and in combination,” concluded that the claims “are directed to a series of steps for assessing a technical community and thus an abstract idea.” Final Act. 3–4; *see also* Adv. Act. 2 (mailed April 30, 2015) (finding that claims are “directed to assessing a technical community and/or a method of organizing human activity using a generic computer”). The Examiner also found that specific steps within claim 1 abstract, including the “identifying steps” and “assessing a score.” Adv. Act. 2; Ans. 3–4. The Examiner further found that the claims, when stripped of structural elements, “recite a method of organizing human activity.” Ans. 4.

Appellants do not contest directly the Examiner’s finding that the claims are directed to an abstract idea in the Appeal Brief. *See* Appeal Br. 6–11. Instead, Appellants raise a series of arguments appearing to address only step two of the *Alice* framework, arguing that the claims, even if abstract, claim “significantly more” than the abstract idea. *See id.* Appellants do, however, argue that the Examiner erred in finding that a human can perform the claimed steps, which touches on whether the claims are direct to an abstract idea. *See* Appeal Br. 9–10; Adv. Act. 2.³ Appellants rely on the specification and references to “numerous

³ In the context of this argument, Appellants argue that the claimed operations “amount to significantly more than the alleged abstract idea” (i.e., step two), and “that the practical application and specific operations recited in the pending claims provide evidence that the subject matter is not abstract (e.g., not purely mental)” (i.e., step one). Appeal Br. 10. Accordingly, we consider Appellants’ argument that a human cannot perform the claimed steps as part of step one, with our discussion here also applying to Appellants’ effort to tie the argument to step two.

communities and characteristics” that need to be assessed, as well as the “sheer number of characteristics to be retrieved from a database and identified.” *Id.* at 9–10. Appellants’ arguments do not establish error in the Examiner’s finding that a human could perform the claimed steps when stripped of their computer functionality. The specification seems to implicitly acknowledge this by describing the prior art approach to assessing a technical community, which involved personal interviews and focus groups. *See Spec.* ¶ 4. The specification notes the “need for a comprehensive, quantitative approach to analyze/assess technical communities,” but a human could add quantitative feedback during those interviews and collate the data without a computer. *See id.* at ¶ 5. Moreover, the “sheer number” of characteristics and other metrics Appellants point to are not claimed, and therefore the claims cover analysis of a small number of characteristics. *See Appeal Br. 13 (Claims App.)*. We are not persuaded that an individual could not perform the claimed steps for a more limited community and number of characteristics, through a series of interviews and extensive notes, followed by collation and analysis of the relevant data. *See Spec.* ¶ 4. In addition, even if the Examiner erred in finding that a human could perform the claimed steps, that error, standing alone, would not warrant a conclusion that the Examiner erred in finding that the claims are directed to an abstract idea or fail to add “significantly more” to the abstract idea.

Appellants also raise an issue related to step one in Reply, where Appellants take issue with the Examiner’s finding that the claims “recite a method of organizing human activity.” Reply Br. 2 (quoting Ans. 4). Appellants contend that “even if the recited operations for ‘assessing a

technical community’ in the pending claims were interpreted as being directed to an abstract idea (which Appellants do not concede), these claims are not directed to the alleged judicially-recognized exception of a method of organizing human activity.” *Id.* According to Appellants, consideration of the 2015 Guidelines,⁴ which issued after Appellants filed the Appeal Brief, support the position that the pending claims “are not directed to a judicially recognized exception” as set forth in the Office’s guidance. Reply Br. 2–3.

Appellants’ arguments in Reply do not apprise us of error in the Examiner’s finding that claim 1 is directed to an abstract idea of “assessing a technical community.” Final Act. 4. Appellants argue that the Examiner erred in finding that the claims amount to “organizing human activity,” but to the extent that Appellants implicitly suggest that this alleged error fatally undermines the Examiner’s conclusion that the claims are directed to an abstract idea, we disagree. A finding that claims are directed to organizing human activity is just one way to support the conclusion that the claims are directed to an abstract idea. *See* 2015 Guidelines at 3–5. Moreover, to the extent that Appellants’ argument suggests that the Examiner was *required* to cite to an analogous case to support a finding that the claims are directed to an abstract idea, we again disagree. *See* Reply Br. 3. The 2015 Guidelines do not impose a requirement that the Examiner must rely on case law precedent in order to properly support such a finding. Rather, the 2015 Guidelines, when discussing the requirements of the examiner’s prima facie case, state that “the examiner’s burden is met . . . for example by providing a reasoned rationale that identifies the judicial exception recited in the claim.

⁴ *July 2015 Update on Subject Matter Eligibility*, 80 Fed. Reg. 45,429 (July 30, 2015) (“2015 Guidelines”).

. . . This rationale *may* rely, where appropriate, . . . on the case law precedent.” *Id.* at 6 (emphasis added). In addition, the examiner’s burden to establish a prima facie case is satisfied by “notify[ing] the applicant . . . [by] stating the reasons for [its] rejection, or objection or requirement, together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application.” *In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011) (quoting 35 U.S.C. § 132).

Here, we find the Examiner’s rejection satisfies the initial burden of production by identifying the claims as directed to assessing a technical community, and identifying several claim limitations as abstract. *See* Final Act. 3–4; Adv. Act. 2; Ans. 3–4. Appellants’ arguments regarding whether a human can perform the steps and the “organizing human activity” finding do not apprise us of error in the Examiner’s finding that the claims are directed to an abstract idea.

We note the similarity between the claimed subject matter and the claims before the court in *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016). In *Electric Power*, the method claims at issue were directed to performing real-time performance monitoring of an electric power grid by collecting data from multiple data sources, analyzing the data, and displaying the results. *Electric Power*, 830 F.3d at 1351–52. The Federal Circuit noted that “[i]nformation as such is an intangible,” and that “collecting information, including when limited to particular content (which does not change its character as information), [is] within the realm of abstract ideas.” *Id.* at 1353. The Court held that the claims were directed to an abstract idea, explaining that “[t]he advance they purport to make is a process of gathering and analyzing information of a specified content, then

displaying the results, and not any particular assertedly inventive technology for performing those functions.” *Id.* at 1354 (“[W]e have treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category.”). Appellants have not adequately shown that collecting and analyzing information related to technical communities, and analyzing what the results indicate about the communities, is rooted in an improvement in computer technology. As in *Electric Power*, the focus of the claims here is not on “an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.” *Id.* at 1354. The general similarity between the claims here and in *Electric Power* provides further support for the finding that the claims are directed to an abstract idea.

Step Two

The Examiner found that the “claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception.” Final Act at 4. More specifically, the Examiner found that the “only elements claimed are a database, interface, displays and processor,” and such structures are “generically recited computer elements [that] do not add a meaningful limitation to the abstract idea because they would be routine in any computer implementation.” *Id.* The Examiner also found that “generally linking the system to a particular technological environment, that is implementation via computers,” is insufficient to amount to “significantly more” than the abstract idea, when those features do “not change the operation of the computer.” Adv. Act. 2; *see also* Ans. 4. The Examiner further found that

[t]hese additional elements do not address a challenge particular to the internet and/or necessarily rooted in computer technology, but rather address a challenge particular to assessing human talents and determine and managing the values of those talents. These additional elements do not improve the function of the computers, but rather they merely limit the abstract idea to a particular technological environment.

Ans. 4.

Appellants raise a series of arguments with respect to step two. First, Appellants argue that the “non-obviousness of the pending claims is evidence of ‘transformation’ into a patent-eligible invention.” Appeal Br. 6 (emphasis omitted). Appellants contend that the withdrawal of all rejections based on prior art establishes the novel and non-obviousness nature of the claimed subject matter, and therefore the claims must provide the “inventive concept” necessary to satisfy the second step of *Alice*. *Id.* at 6–7; Reply Br. 3–4.

The Examiner’s withdrawal of rejections based on prior art does not suffice to confer patent eligibility under 35 U.S.C. §101. “[U]nder 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). “[A] claim for a new abstract idea is still an abstract idea.” *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016). “The search for a § 101 inventive concept is thus distinct from demonstrating § 102 novelty.” *Id.*

Next, Appellants argue that the “pending claims do not preempt the alleged abstract idea of ‘assessing a technical community’” because they do

not cover the different methods disclosed in the prior art the Examiner relied on in the previous rejections. Appeal Br. 8. Appellants again rely on the withdrawal of previous rejections based on prior art as evidence of a lack of preemption. *See id.*

The Examiner correctly noted in the Answer that the concept of preemption is not a stand-alone test for eligibility, and questions of preemption are inherent in the two-part framework of *Alice*. Ans. 6 (citing 2015 Guidelines). In addition, although the extent of preemption is a consideration, the absence of complete preemption is not dispositive. *See, e.g., Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (“While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.”). Accordingly, even if the claims do not tie-up or monopolize the entire abstract idea as Appellants argue, that alone is not enough to render the claims patent-eligible.

Appellants also argue that the Examiner failed to evaluate the claims as a whole because the Examiner did not reference every limitation in the analysis, and only discussed the preamble and certain claim limitations. Appeal Br. 11. We are not persuaded that the Examiner did not properly examine the claims as a whole. First, the Examiner stated that the claims were analyzed “as a whole.” Final Act. 3. Second, Appellants simply assume that any limitation not expressly discussed by the Examiner necessarily provides the “significantly more” required to satisfy step two of *Alice*, but do not analyze any of those limitations or explain why they amount to significantly more. *See* Appeal Br. 11. Appellants must do more than broadly refer to “six (6) additional operations/steps” that the Examiner

did not discuss in order to establish reversible error. *Id.* The question is not whether these specific limitations are directed to an abstract idea, as Appellants' argument implies, it is whether the claim is directed to an abstract idea, and whether these limitations, considered individually or considered with the claim as a whole, add significantly more. Appellants' argument that the Examiner's failure to specifically address every limitation amounts to a concession that they are not abstract or add "significantly more" misses the mark, as does Appellants' reiteration that these steps are "novel and non-obvious," because, as noted above, the patent-eligibility inquiry is distinct from the anticipation and obviousness inquiries.

Finally, Appellants argue that the claims "should be found to be patent-eligible for reasons similar to those set forth in *DDR Holdings*." Appeal Br. 7 (citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014)). In support of the argument, Appellants argue that the claimed solution is necessarily rooted in technology because it relates "to retrieving information from computer databases and generating interfaces based on computer models of a technical community lifecycle." *Id.* Appellants also contend that "the claims recite a specific way to solve the problem of assessing a technical community," namely "by determining a potential of a technical community to move to a more contributory stage of the lifecycle." *Id.*

We are not persuaded that the claims here are analogous to those "rooted in computer technology" at issue in *DDR*. In *DDR*, the Federal Circuit found that the claims "do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claimed solution is

necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” *Id.* at 1257.

Appellants do nothing more than recite the claim language without explaining how it is directed to computer functions. That is not sufficient to show that the Examiner erred. Moreover, Appellants’ argument is inconsistent with the language recited in the claims, and does not describe how the computer components perform their functions. Unlike the claims in *DDR*, we agree with the Examiner’s finding that the claims in this case “do not address a challenge particular to the internet and/or necessarily rooted in computer technology, but rather address a challenge particular to assessing human talents and determining and managing the values of those talents.” Ans. 4 (“These additional elements do not improve the function of the computers, but rather they merely limit the abstract idea to a particular technological environment.”).

Further, although the claimed system and method may be more efficient than prior art, non-computer solutions, that is not enough to make the claims patent-eligible. *See FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1095 (Fed. Cir. 2016) (“While the claimed system and method certainly purport to accelerate the process of analyzing audit log data, the speed increase comes from the capabilities of a general-purpose computer, rather than the patented method itself.”); *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (“[T]he fact that the required calculations could be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter.”). Accordingly, Appellants’ reference to the ability of its computerized system to handle “numerous communities and characteristics”

does not establish error in the Examiner's findings when Appellants have not explained adequately how the claims are directed to an improvement in computer technology. *See* Appeal Br. 9–10.⁵

Based on the foregoing, we are not persuaded that the Examiner erred in finding that the claims are not directed to an inventive concept or something more than the abstract idea. Accordingly, we sustain the rejection of claims 1–25 as not directed to statutory subject matter.

DECISION

We affirm the decision of the Examiner to reject 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).

AFFIRMED

⁵ Appellants made an additional argument in Reply that the claims provide improvements to another technology or technical field. Reply Br. 4–5. This assertion was made for the first time in Reply, and is based on a portion of the 2014 Interim Guidelines, which were available at the time of filing of Appellants' opening Appeal Brief. Appellants portray the argument as a response to the Examiner's discussion of computer-related claim limitations, but the argument goes well beyond those findings and fails to establish good cause for raising the argument for the first time in Reply. Accordingly, Appellants waived the argument. *See* 37 C.F.R. 41.41(b)(2) (2014).