



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.
12/873,810	09/01/2010	Bernhard F. Kraft	0095-0019	6016
113123	7590	08/01/2018	EXAMINER	
Harrity & Harrity, LLP 11350 Random hills road Suite 600 Fairfax, VA 22030			THATCHER, CLINT A	
			ART UNIT	PAPER NUMBER
			2191	
			NOTIFICATION DATE	DELIVERY MODE
			08/01/2018	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):

docket@harrityllp.com
mpick@harrityllp.com
ptomail@harrityllp.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte BERNHARD F. KRAFT, SHANTIPRAKASH MOTWANI,
COLIN P. JARRETT, ANIRUDHA SINGH, REVA MODI,
VIKRANT SHYAMKANT KAULGUD, and
VIBHU SAUJANYA SHARMA

Appeal 2018-001154
Application 12/873,810¹
Technology Center 2100

Before JAMES R. HUGHES, KRISTEN L. DROESCH, and
KAMRAN JIVANI, *Administrative Patent Judges*.

HUGHES, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134(a) of the Examiner’s Final Decision rejecting claims 1–8, 11, 13, 14, 16–19, and 21–25. Claims 9, 10, 12, 15, and 20 have been canceled. Final Act. 1–2.² We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

¹ According to Appellants, the real party in interest is Accenture Global Services Limited. Appeal Br. 3.

² We refer to Appellants’ Specification (“Spec.”) filed Sept. 1, 2010 (claiming benefit of India Patent App. No. 1987/MUM/2009, filed Sept. 1, 2009); Appeal Brief (“Appeal Br.”) filed June 20, 2017; and Reply Brief

Appellants' Invention

The invention at issue on appeal concerns computer readable media, apparatuses, and methods evaluating software code quality by determining a first code quality index based on an automated review of each of a plurality of coding violation indications, determining a second code quality index based on a manual review of each of the plurality of coding violation indications, and determining a third code quality index by an averaging the first code quality index and the second code quality index. (Spec. ¶¶ 1, 7; Abstract.)

Illustrative Claim

Independent claim 1, reproduced below, further illustrates the invention:

1. A method comprising:
 - receiving, by a device, a plurality of coding violation indications associated with one or more portions of code;
 - categorizing, by the device, the plurality of coding violation indications based on a plurality of coding quality attributes to create a plurality of categorized violation indications;
 - determining, by the device and based on the plurality of categorized violation indications, a first code quality index for each of the plurality of coding quality attributes,
 - the first code quality index being determined based on an automated review of each of the plurality of coding violation indications;

("Reply Br.") filed Nov. 13, 2017. We also refer to the Examiner's Final Office Action (Final Rejection) ("Final Act.") mailed Dec. 30, 2016; and Answer ("Ans.") mailed Oct. 5, 2017.

receiving, by the device, information associated with a second code quality index for each of the plurality of coding quality attributes,

the information associated with the second code quality index for each of the plurality of coding quality attributes being determined based on a manual review of each of the plurality of coding violation indications;

determining, by the device and based on the first code quality index and the second code quality index, a third code quality index,

the third code quality index being an average of the first code quality index and the second code quality index; and

providing, by the device and for presentation, quality information associated with the one or more portions of the code,

the quality information including:

information identifying each of the plurality of coding quality attributes,

a respective first code quality index associated with each of the plurality

of coding quality attributes,

a respective second code quality index associated with each of the plurality of coding quality attributes, and

a respective third code quality index associated with each of the plurality of coding quality attributes.

*Rejection on Appeal*³

The Examiner rejects claims 1–8, 11, 13, 14, 16–19, and 21–25 under 35 U.S.C. § 101 as being directed to patent ineligible subject matter. *See* Reply Br. 2–5.

³ The Examiner rejected claims 1–8, 11, 13, 14, 16–19, and 21–25 under

ISSUE

Based upon our review of the administrative record, Appellants' contentions, and the Examiner's findings and conclusions, the pivotal issue before us follows:

Did the Examiner err in finding Appellants' claims were directed to patent-ineligible subject matter under 35 U.S.C. § 101?

ANALYSIS

The Examiner provides the same reasoning for rejecting independent claim 1 and independent claims 11 and 21, and rejects representative claim 1 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Ans. 2–5. Specifically, the Examiner rejects claim 1 as being directed to patent-ineligible subject matter in that the claim recites collecting information, analyzing it, and displaying certain results of the collection and analysis[, which] is an idea of itself" (Ans. 3). *See* Ans. 3–4. Appellants contend the claim 1 (and the other pending claims) are not directed to an

35 U.S.C. § 101 as being directed to patent-ineligible subject matter in the Final Office Action, based on finding that the instant claims were analogous to those found patent ineligible in *Cyberfone* and *Smartgene*. *See* Final Act. 2–4 (citing *Cyberfone Systems, LLC v. CNN Interactive Group, Inc.*, 558 Fed. Appx. 988, 992 (Fed. Cir. 2014); *SmartGene, Inc. v. Advanced Biological Laboratories, SA*, 555 Fed. Appx. 950, 955 (Fed. Cir. 2014)). The Examiner withdrew the previous § 101 rejection in the Examiner's Answer and replaced it with a new § 101 rejection (a new ground of rejection) based on finding that the instant claims were analogous to *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). *See* Ans. 2–5. Accordingly, we address only the rejection properly before us—the Examiner's new ground of rejection presented in the Examiner's Answer.

Appeal 2018-001154
Application 12/873,810

abstract idea because the Examiner's interpretation of the claims and § 101 analysis are incorrect. Specifically, Appellants contend, *inter alia*, that:

Unlike *Electric Power Group*, the present claims do not merely focus on a desirable result, but actually provide an inventive means of efficiently analyzing software code so that a software code quality and all potential coding standards violations can be determined for the software code.

Reply Br. 3.

Under 35 U.S.C. § 101, a patent may be obtained for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” The Supreme Court has “long held that this provision contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)).

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, 77–80 (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. Assuming that a claim nominally falls within one of the statutory categories of machine, manufacture, process, or composition of matter, the first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts” (*id.*), e.g., to an abstract idea. For example, abstract ideas include, but are not limited to, fundamental economic practices, methods of organizing human activities, an idea of itself, and mathematical formulas or relationships. *Id.* at 2355–57. If the claims are not directed to an abstract idea, the inquiry ends. Otherwise,

Appeal 2018-001154
Application 12/873,810

the inquiry proceeds to the second step where the elements of the claims are considered “individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 78–79). This second step is described as “a search for an “inventive concept”—*i.e.*, an element or combination of elements that is ‘. . . significantly more than . . . the [ineligible concept] itself.’” *Id.* at 2355 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73).

Alice Step 1 Analysis

Turning to the first step of the eligibility analysis, “the first step in the *Alice* inquiry . . . asks whether the focus of the claims is on the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016). “The abstract idea exception prevents patenting a result where ‘it matters not by what process or machinery the result is accomplished.’” *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016) (quoting *O’Reilly v. Morse*, 56 U.S. (15 How.) 62, 113 (1853)). “We therefore look to whether the claims . . . focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *McRO*, 837 F.3d at 1314.

The Examiner finds the limitations of claim 1 are analogous to the claims found patent-ineligible in *Electric Power Group*. See Ans. 3–4. In particular, the Examiner finds claim 1 is directed to the result or “idea of itself” (Ans. 3) of “collecting information, analyzing it, and displaying

Appeal 2018-001154
Application 12/873,810

certain results of the collection and analysis.” Ans. 3. The Examiner explains that claim 1 recites “collecting information” (Ans. 3, emphasis omitted), in that the device receives information— coding violation indications and information associated with the second quality code index; recites “analyzing information” (Ans. 4, emphasis omitted), in that the device categorizes information and determines indexes; and recites “displaying certain results of the collection and analysis” (Ans. 4, emphasis omitted), by displaying the indexes and coding quality attributes. *See* Ans. 3–4.

We agree with Appellants that claim 1 (and the other pending claims) is not directed solely to an abstract concept or idea, and is not analogous to the claims found patent-ineligible in *Electric Power Group*. In *Electric Power Group*, the claim at issue recited a “method of detecting events on an interconnected electric power grid in real time over a wide area and automatically analyzing the events” by “receiving . . . data streams,” “receiving data from other power system data sources,” and “receiving data from a plurality of non-grid data sources,” “detecting and analyzing events . . . based on . . . limits, sensitivities and rates of change . . . and dynamic stability metrics,” and “displaying the event analysis results.” *Elec. Power Grp.*, 830 F.3d at 1351–52 (quoting claim 12). The Federal Circuit determined that the “focus of the asserted claims, as illustrated by claim 12 quoted above, [was] on collecting information, analyzing it, and displaying certain results of the collection and analysis.” *Elec. Power Grp.*, 830 F.3d at 1353. The court further explained, “The advance [the claim] purport[s] to make is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly

Appeal 2018-001154
Application 12/873,810

inventive technology for performing those functions.” *Elec. Power Grp.*, 830 F.3d at 1354. In summary, the court found the focus of the claims in *Electric Power Group* was on displaying the result data analysis, where the data analysis (detecting and analyzing events) merely compared measurements to limits (and/or sensitivities, and/or rates of change) and further to derived metrics. *See Elec. Power Grp.*, 830 F.3d at 1353–54. The analysis (above-described comparison), however, was not recited in any detail in the claim—the claim recited the “what,” (the results), but not the “how” (the process by which the results were obtained). *See id.*

Appellants’ claim 1 recites categorizing coding violation indications based on coding quality attributes; determining a first code quality index for each coding quality attribute—by an automated review of the coding violation indications based on the categorized violation indications; and determining a third code quality index (for each coding quality attribute), which is an average of the first code quality index and a second code quality index—determined by a manual review of each coding violation indication. Subsequent to the categorization and analysis, the resulting quality information (including the indexes and coding quality attributes) for a portion of software code is displayed for review. *See Appeal Br.* 32–33 (Claim Appendix, claim 1). In the instant claim, the focus is not on displaying the results of the analysis (quality information), but instead, upon the processes of obtaining the quality information (categorization, analysis, and generating indexes). Thus, we agree with Appellants that claim 1 is not directed to an abstract idea as set out in the first step of the *Alice* eligibility analysis.

Appeal 2018-001154
Application 12/873,810

Consequently, we are constrained by the record before us to find that the Examiner erred in finding Appellants' claim 1 was directed to patent-ineligible subject matter under 35 U.S.C. § 101. Independent claims 11 and 21 include limitations of commensurate scope. Claims 2–8, 13, 14, 16–19, and 22–25 depend on claims 1, 11, and 21, respectively. Accordingly, we reverse the Examiner's rejection under § 101 of claims 1–8, 11, 13, 14, 16–19, and 21–25.

CONCLUSION

Appellants have shown that the Examiner erred in rejecting claims 1–8, 11, 13, 14, 16–19, and 21–25 under 35 U.S.C. § 101.

DECISION

We reverse the Examiner's rejections of claims 1–8, 11, 13, 14, 16–19, and 21–25.

REVERSED