

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

IN RE: MICHAEL J. ROSENBERG,
Appellant

2019-2251

Appeal from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in No. 12/102,992.

Decided: June 4, 2020

RONALD BRUCE GOLDSTEIN, Law Offices of Ronald B.
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Andrei Iancu. Also represented by THOMAS W. KRAUSE,
AMY J. NELSON, FARHEENA YASMEEN RASHEED.

Before DYK, WALLACH, and CHEN, *Circuit Judges*.

CHEN, *Circuit Judge*.

Michael Rosenberg seeks review of a Patent Trial and
Appeal Board (Board) decision affirming an examiner's re-
jection of claims 1, 3–9, 12–19, 21–27, and 30–36 of U.S.

Patent Application No. 12/102,992 (the '992 Application) under 35 U.S.C. § 101. We *affirm*.

BACKGROUND

The '992 Application describes a method and system to collect performance-related data about a clinical trial, analyze that data, and report on whether any adjustments should be made to the clinical trial based on the review of the collected data. As the specification explains with regards to this kind of performance review, “[t]he invention finds application in conducting clinical trials in the medical field, as well as in other management systems, by providing a fully integrated ability to handle the many collection, analytic, and reporting functions.” J.A. 32. To avoid the lost time and cost of performing those collection, analytic, and reporting functions in person, the specification describes performing them on a computer, in which data collected at remote sites is electronically transmitted to a central computer programmed to review the data to determine whether any “procedures or parameters” used in the trial require modification. The collected data “comprise performance metrics,” which the specification describes as “benchmarks such as the number of queries generated by a clinical site, time to respond to queries, time to submit data following a patient visit, and other quality measures.” J.A. 39. Claim 1 is representative¹:

1. A computer-implemented method for centrally managing data in an adaptive clinical trial or other adaptive process that is conducted at a plurality of geographically remote sites according to a set of procedures or parameters, said method comprising the steps of:

¹ The government asserts that claim 1 is representative, Appellee’s Br. at 4, and Mr. Rosenberg does not argue the substance of any limitations except for claim 1.

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- (a) collecting data in the course of conducting said clinical trial or other process at a remote site, wherein the data comprise performance metrics with respect to said clinical trial or other process;
- (b) electronically transmitting the data from said remote site to a processing location;
- (c) checking the transmitted data at said processing location, in automated fashion, to assess the consistency of the data with respect to other collected data, to evaluate changes in the data as compared with data collected previously, or to monitor the data for trends over time;
- (d) electronically reporting the data to a pre-programmed computer module;
- (e) determining, by use of said pre-programmed computer module, whether procedures or parameters utilized in conducting said clinical trial or other process require modification; and
- (f) providing instructions, based on said determining, to follow or modify the procedures or parameters utilized in conducting said clinical trial or other process.

J.A. 26.

The examiner rejected all pending claims under the abstract idea exception of § 101 and the Board affirmed. Specifically, the Board found claim 1 directed to a mental process, “specifically, evaluating data and rendering a judgment or opinion as to how the trial should or should not be modified based on the evaluation.” J.A. 19. In addition, the Board found that claim 1’s reference to generically-defined computer components (e.g., pre-programmed module) for performing the abstract process did not amount to an inventive concept. *See* J.A. 20–21, 357–59.

Mr. Rosenberg appeals the Board's decision. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

Section 101 allows inventors to obtain patents on “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” § 101. However, “this provision contains an important implicit exception”: an inventor may not patent laws of nature, natural phenomena, or abstract ideas. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014). To assess whether a patent claim violates this exception to the terms of § 101, the Supreme Court has set forth a two-step framework: (1) whether the claim is “directed to a patent-ineligible concept,” i.e., a law of nature, natural phenomenon, or abstract idea, and, if so, (2) whether the elements of the claim, considered “both individually and ‘as an ordered combination,’” add enough to “transform the nature of the claim’ into a patent-eligible application.” *Id.* at 217 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 78 (2012)).

Patent eligibility under § 101 is a question of law that may contain underlying issues of fact. *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1342 (Fed. Cir. 2018) (citing *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018)). We review an ultimate conclusion on patent eligibility *de novo*. *See id.*

I. ALICE STEP 1

The inquiry at this first stage looks at the “focus” of the claims, and their “character as a whole.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). Representative claim 1 falls into a now-familiar class of claims directed to a patent-ineligible concept. In past cases, we have held claims focused on collecting and analyzing certain information and then reporting

the results of that analysis are directed to an abstract idea. See e.g. *Elec. Power Grp.*, 830 F.3d at 1353. In particular, “we 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.” *Id.* at 1354.

We agree with the Board that Mr. Rosenberg’s claims are directed to the basic idea of deciding whether to fine-tune a given system (here, a clinical trial) based on reviewing the system’s performance data. The claim limitations describe computer-performed mental steps that would otherwise have been performed in person to assess and respond to performance measures in the field, including: “assess[ing] the consistency of the data as compared with data previously collected,” “evaluat[ing] changes in the data,” “monitor[ing] the data for trends over time,” “determining . . . whether procedures or parameters utilized in conducting said clinical trial or other process require modification,” and “providing instructions . . . to follow or modify the procedures or parameters.” J.A. 26.

In *Electric Power*, we held ineligible similar claims in the context of optimally managing an electric power grid at a central location. 830 F.3d at 1356. There the claimed method received data streams from geographically distinct locations of the electric power grid, analyzed those data streams in real time to determine power grid vulnerability, and displayed the results of that analysis. *Id.* at 1351–52. Similarly, Mr. Rosenberg’s claimed method collects data from remote clinical trials, analyzes that data at a central computer, and communicates the results through instructions for management of the clinical trial. Because the purported advance “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,” the claimed method is directed to an abstract idea. *Id.* at 1354. For the same reasons, we see no error in the Board’s conclusion that Mr.

Rosenberg's claims are analogous to the patent-ineligible claims in *SmartGene, Inc. v. Advanced Biological Labs., SA*, 555 F. App'x 950 (Fed. Cir. 2014) (finding ineligible a computer-implemented method of selecting a therapeutic regimen by comparing input data with stored data using rules).

Mr. Rosenberg emphasizes that his claimed invention, through computer-implementation, improves efficiency and reduces cost by collecting and analyzing performance metric data from remote locations "in real time." Appellant's Br. at 7. But as the Board correctly noted, the claims do not require the collection or analysis of data "in real time." J.A. 19. More fundamentally, it is not enough, for patent-eligibility purposes, to improve an abstract process by invoking a computer merely as a tool for carrying out that process. *Elec. Power Grp.*, 830 F.3d at 1354. As we recently reiterated, "claiming the improved speed or efficiency inherent with applying the abstract idea on a computer' [is] insufficient to render the claims patent eligible as an improvement to computer functionality." *Customedia Techs. v. Dish Network Corp.*, No. 18-2239, slip op. 10 (Fed. Cir. March 6, 2020); *Interval Licensing*, 896 F.3d at 1346 ("It is well-settled that placing an abstract idea in the context of a computer does not 'improve' the computer or convert the idea into a patent-eligible application of that idea." (citing *Alice*, 573 U.S. at 222–24)). As in *Electric Power*, because the claim simply invokes computer components such as a "pre-programmed module" in a generic, functional way, "the focus of the claims is not on such an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools." *Elec. Power Grp.*, 830 F.3d at 1353. The ability to make assessments more quickly to provide instructions on whether to modify a clinical trial is at best an improvement on an abstract process itself and not a technical improvement, given the broad, non-specific nature of the claim.

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Moreover, the Board did not err in concluding that the claimed collection and analysis of a particular type of information—“performance metrics”—does not affect the eligibility analysis. “As many cases make clear, even if a process of collecting and analyzing information is ‘limited to particular content’ or a particular ‘source,’ that limitation does not make the collection and analysis other than abstract.” *SAP*, 898 F.3d at 1168 (citing *Elec. Power Grp.*, 830 F.3d at 1353, 1355)). In any event, collecting performance-related information would be necessary for any process with the objective of improving the performance of the trial.

Thus, we agree with the Board that the claims are directed to the abstract concept of monitoring and managing a clinical trial.

II. ALICE STEP 2

We also agree with the Board that the recitation of generic computer components to perform the claimed steps does not provide a transformative inventive concept. J.A. 21. Our inquiry at step 2 asks whether, considering the elements of each claim individually and as an ordered combination, the *additional* elements, excluding the abstract idea, transform the nature of the claim into a patent eligible application. *Alice*, 573 U.S. at 217; *Athena Diagnostics, Inc. v. Mayo Collaborative Servs., LLC*, 927 F.3d 1333, 1347 (Fed. Cir. 2019) (Chen, J., concurring in denial of rehearing en banc). Thus, Mr. Rosenberg’s arguments that novelty of the abstract idea itself—evaluating data and rendering a judgment or opinion as to how the trial should or should not be modified based on the evaluation—is the transformative inventive concept are not sufficient to meet step 2. “[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).

Mr. Rosenberg argues that the claimed “pre-programmed computer module” is not a generic computer

component because the “determining” and “providing instructions” steps are “specific to the analysis of performance metric data.” Appellant’s Br. at 28. But Mr. Rosenberg offers no explanation, and we see none, as to why these claimed steps of his abstract process would require anything more than conventional computer functionality to perform. Instead, the claims merely invoke the use of a generic computer “module” programmed to perform the desired functions of determining whether modifications to the clinical trials are needed and providing instructions on those modifications. We have held that such results-oriented claiming fails to meet the “inventive concept” requirement. *See Elec. Power Grp.*, 830 F.3d at 1356 (finding no inventive concept in claims which “specif[ie]d what information in the power-grid field it is desirable to gather, analyze, and display, including in ‘real time,’” but “d[id] not include any requirement for performing [those] claimed functions . . . by use of anything but entirely conventional, generic technology.”); *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1170 (Fed. Cir. 2018) (finding that the “invocation of [] computers and networks is not enough to establish the required ‘inventive concept’ in application” of “an advance in mathematical techniques in finance”); *Smart-Gene*, 555 F. App’x at 954 (finding ineligible a claim which “does no more than call on a ‘computing device,’ with basic functionality for comparing stored and input data and rules, to do what doctors do routinely”); *see also Alice*, 573 U.S. at 225 (finding no inventive concept in claims that “simply recite the concept of intermediated settlement as performed by a generic computer”).

The remaining steps of the claim, i.e., “collecting,” “electronically transmitting,” “checking,” and “electronically reporting the data,” also fail to provide any transformative inventive concept. J.A. 26. We have previously explained that these types of data-related functions are not enough to save a claim from ineligibility. *See, e.g., Elec. Power Grp.*, 830 F.3d at 1354–55 (finding no inventive

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concept in gathering, sending, and presenting desired power grid information in real-time); *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (finding no inventive concept in claimed steps of sending electronic messages over a network, storing test results, and “using a computerized system . . . to automatically determine’ an estimated outcome and setting a price”); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.”).

At bottom, the claimed invention merely employs generic computer components so that “what formerly had to be checked in the field [would] be checked, instead, at a central location.” J.A. 57. Nothing in the specification describes the computers at the remote clinical site and central processing site as requiring anything more than conventional computer components. *See, e.g.*, J.A. 32–33, 48–50. Considering the elements of each claim individually and as an ordered combination, the claims do not state any transformative inventive concept and thus fail to meet the standard for patent eligibility under § 101.

CONCLUSION

We have considered Mr. Rosenberg’s remaining arguments and find them unpersuasive. For the foregoing reasons, we conclude that the claims at issue are ineligible under § 101 and *affirm* the decision of the Board.

AFFIRMED

COSTS

No costs.