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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/730,630	10/11/2017	Michael Dale Nelson		3422

151284   7590   06/17/2020
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EXAMINER
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ART UNIT	PAPER NUMBER
3685	

MAIL DATE	DELIVERY MODE
06/17/2020	PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Ex parte MICHAEL DALE NELSON

_____

Appeal 2019-005924
Application 15/730,630
Technology Center 3600

_____

Before BIBHU R. MOHANTY, NINA L. MEDLOCK, and
TARA L. HUTCHINGS, *Administrative Patent Judges*.

MOHANTY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), the Appellant[1] appeals from the
Examiner's decision to reject claims 1–6 and 9–20. We have jurisdiction
under 35 U.S.C. § 6(b).

SUMMARY OF THE DECISION

We AFFIRM.

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[1] We use the word Appellant to refer to "applicant" as defined in 37 C.F.R.
§ 1.42(a). Appellant identifies the real party in interest as the Inventor.
(Appeal Br. 1).

CLAIMED SUBJECT MATTER

The Appellant's claimed invention relates to filtering and compressing polling data based on statistical methodology using past polling errors (Spec. 1, lines 28, 29). Claim 9, reproduced below with the italics added, is representative of the subject matter on appeal.

> 9. A method of filtering and compressing polling data that improves computer performance in processing the compressed polling data comprising:
> *receiving past polling data* applicable to the Republican and Democrat candidates in at least one past election period from multiple geographic regions;
> *receiving past voting data* applicable to said past polling data; generating polling error data from said past polling data and said past voting data;
> *generating rounded occurrence event data* from the said polling error data and arranged into standard deviation intervals and rounded to the nearest whole integer or half integer; and said rounded occurrence event data has a standard deviation interval value associated with each geographic region;
> *generating occurrence frequency data* from said rounded occurrence event data, wherein said standard deviation interval value is selected from one of the following:
>> (i) 0 or 0 and one or more of the following values: -1 and+ 1, when whole integer rounding is used, and
>> (ii) 0 or 0 and one or more of the following: values: -.5, +.5, -1 and+ 1, when half integer rounding is used, and wherein said occurrence frequency data maintain a relationship to the geographic regions applicable to the Republican and Democrat candidates and to each past polling period;
> *generating electronic compression filter data from the occurrence frequency data* by combining the geographic regions for the Republican and Democrat candidates for at least one past polling period, wherein said electronic compression filter data are

related to a limited number of geographic regions and comprising a reduction of at least 30 to 90 percent of the total number of geographic regions; and

applying said electronic compression filter data by performing at least one additional step selected from the group consisting of:

(a) *generating a report identifying said limited number of geographic regions* included within the compression filter data; and

(b) *projecting a winner in an upcoming election* by receiving polling data applicable to an upcoming election; processing said polling data applicable to said upcoming election as reduced by said limited number of geographic regions; and *displaying a projected winner of said upcoming election.*

THE REJECTIONS

The following rejections are before us for review:

1. Claims 1–6 and 9–20 are rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter.

2. Claims 1–6 and 9–20 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

3. Claims 1–6 and 15 are rejected under 35 U.S.C. § 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter that the inventor regards as the invention.

FINDINGS OF FACT

We have determined that the findings of fact in the Analysis section below are supported at least by a preponderance of the evidence.[2]

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[2] *See Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Patent Office).

ANALYSIS

Rejection under 35 U.S.C. § 101

The Appellant argues that the rejection of claim 9 is improper because the claim is not directed to an abstract idea (Appeal Br. 13–36; Reply Br. 4). The Appellant argues further that the claim is "significantly more" than the alleged abstract idea (Appeal Br. 37–46).

In contrast, the Examiner has determined that the rejection of record is proper (Final Act. 8–19; Ans. 5–10).

We agree with the Examiner. 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. *E.g.*, *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014).

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*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). 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 (1981)); "tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores" (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1854))); 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.* (internal citation omitted) (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.").

The PTO published revised guidance on the application of § 101 in January 2019. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Guidance"). Under the 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, i.e., evaluate whether the claim "appl[ies], rel[ies] on, or use[s] the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception." (*see* Guidance, 84 Fed. Reg. at 54; *see also* MPEP § 2106.05(a)–(c), (e)–(h)).

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 is 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 Guidance, 84 Fed. Reg. at 56.

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 (citation 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.* (alterations in original) (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.*

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The Specification states that the invention generally relates to filtering and compressing polling data based on statistical methodology using past polling errors (Spec. 1, lines 28, 29). Here, the Examiner has determined that "Appellant's limitations are directed to the abstract idea of processing data using generic computing functions (e.g., receiving, processing, and storing)" (Ans. 8). We substantially agree with the Examiner. We determine that claim 9 sets forth the subject matter in italics above. The claim recites: [1] "receiving past polling data"; [2] "receiving past voting data"; [3] "generating polling error data"; [4] "generating rounded occurrence event data"; [5] "generating occurrence frequency data"; [6] "generating electronic compression filter data from the occurrence frequency data"; [7] "applying said electronic compression filter data"; [8] "generating a report identifying said limited number of geographic regions"; [9] "projecting a winner in an upcoming election"; and [10] "displaying a projected winner of said upcoming election," which describe the concept of filtering and compressing polling data to project a winner in an election, which is a mathematical concept using mathematical relationships, formulas, and calculations, i.e. a judicial exception. In *Bilski v. Kappos*, 560 U.S. 593, 599, Jun. 28, 2010 a mathematical formula for hedging was held to be an abstract concept. In *Parker v. Flook*, 437 U.S. 584, 585, June 22, 1978, a formula for computing an alarm limit was held to be a mathematical algorithm or formula.

Having determined that claim 9 recites an abstract idea, we next determine whether the claim recites additional elements that integrate the judicial exception into a practical application. *See* Guidance, 84 Fed. Reg. at 54–55. The Revised Guidance references the MANUAL OF PATENT EXAMINING PROCEDURE ("MPEP") §§ 2106.05(a)–(c) and (e)–(h).

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Contrary to Appellant's arguments (*see, e.g.*, Appeal Br. 40–46), the claims do not improve computer functionality, improve another field of technology, utilize a particular machine, or effect a particular physical transformation. Rather, we determine that nothing in the claims imposes a meaningful limit on the judicial exception, such that the claims are more than a drafting effort to monopolize the judicial exception.

For example, in claim 9 the steps of "receiving," "generating," "applying," "processing" and "displaying" are merely steps performed by a generic computer that do not improve computer functionality. Appellant argues that the claimed invention dramatic reduces geographic polling regions, reduces error data in the files (thereby reducing the file size and improving processing efficiency), and improves the selection, processing, and/or transmission of polling data. *Id.* at 41; *see also id.* at 46 (contending that the invention results in "a substantial reduction in the size of the database based on actual tests with real data and not just a possibility"). But the improvements identified by Appellant result from an improvement in a process that is itself the abstract idea, not improvements to computer functionality or other technology. Put simply, the recited functions do not purport to improve "the functioning of the computer itself" but are merely generic functions performed by a conventional processor to implement the abstract idea. Likewise, these same functions listed above do not improve the technology of the technical field and merely use generic computer components and functions to perform the steps. Also, the recited method functions above do not require a "particular machine" and can be utilized with a general purpose computer, and the steps performed are purely conventional. In this case the general purpose computer is merely an object on which the method operates in a conventional manner. Further, the claim

as a whole fails to effect any particular transformation of an article to a different state. The recited functions fail to provide meaningful limitations to limit the judicial exception and rather are mere instructions to apply the method to a generic computer.

Considering the elements of the claim both individually and as "an ordered combination" the functions performed by the computer system at each step of the process are purely conventional. Each step of the claimed method does no more than require a generic computer to perform a generic computer function. Thus, the claimed elements have not been shown to integrate the judicial exception into a practical application as set forth in the Revised Guidance, which references the MANUAL OF PATENT EXAMINING PROCEDURE ("MPEP") §§ 2106.05(a)–(c) and (e)–(h).

Turning to the second step of the *Alice* and *Mayo* framework, we determine that the claim does not contain an inventive concept sufficient to "transform" the abstract nature of the claim into a patent-eligible application. Considering the claim limitations, both individually and as an ordered combination, the claim fails to add subject matter beyond the judicial exception that is not well-understood, routine, and conventional in the field. Rather the claim uses well-understood, routine, and conventional activities previously known in the art and they are recited at a high level of generality. The Specification at page 16 for example describes using conventional computer components such as a mainframe, desktop, laptop, and smartphone in a conventional manner. Here, the generic computer components which are used to implement the claimed method are well understood, routine, or conventional in the field. The Appellant has not demonstrated that the logic circuits, computer, and database described in the Specification at pages 4, 16, and 19 for instance are not general purpose computer components known

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to perform similar functions in a well-understood manner. Here, the claim has not been shown to be "significantly more" than the abstract idea.

For these above reasons the rejection of claim 9 is sustained. The remaining claims are directed to similar subject matter for which the same arguments have been presented and the rejection of these claims is sustained as well.

Rejection under 35 U.S.C. § 112 (first paragraph)

The Examiner has determined in claim 1 that the recitation of "[a]n electronic compression filtering system that compresses polling data and improves computer performance used in processing the compressed polling data comprising" is not supported by the Specification (Final Act. 20).

In contrast, the Appellant argues that the Specification supports the above cited claim limitation (Appeal Br. 46–48). The Appellant cites, in the Appeal Brief at pages 41 and 42, various statements in the Specification as providing written description support for this portion of the claim.

We agree with the Appellant. Initially, we note that the cited claim limitation is in the preamble, and not a limitation to the claim. Regardless, as noted in the Appeal Brief at page 41, the Specification at page 4, does state that the "electronic filter improves the selection and computer processing and/or transmission of polling data," providing support for the preamble. For these reasons, this rejection of claim 1 is not sustained. The rejection of the remaining claims in this rejection is not sustained for these same reasons.

Rejection under 35 U.S.C. § 112 (second paragraph)

The Examiner has determined that claims 1–6 are improper in claiming multiple statutory classes (Ans. 11, 12).

In contrast, the Appellant argues that this rejection is improper (Appeal Br. 48–50).

We agree with the Appellant. Here the claim 1 is drawn to a system and the components merely include the function they are capable of performing. Accordingly, this rejection is not sustained.

The Examiner has also determined that claims 1–6 are improper for failing to provide sufficient structure for "*a third logic means for generating occurrence frequency data from the rounded occurrence event data; wherein said standard deviation interval value is selected from one of the following...*" (Ans. 12, 13).

The Appellant has failed to provide arguments in regard to this specific rejection and this rejection is summarily sustained.

The Examiner has determined that claim 15 is unclear because the term "subjecting" is unclear (Ans. 15).

In contrast, the Appellant has argued that this rejection is improper (Appeal Br. 52, 53).

We agree with the Appellant. Here, the term "subjecting" is not unclear in the scope of the claim and one of ordinary skill in the art would understand what is being claimed by the term. Accordingly, this rejection is not sustained.

CONCLUSIONS OF LAW

We conclude that Appellant has not shown that the Examiner erred in rejecting claims 1–6 and 9–20 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter.

We conclude that Appellant has shown that the Examiner erred in rejecting claims 1–6 and 9–20 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

We conclude that Appellant has not shown that the Examiner erred in rejecting claims 1–6 under 35 U.S.C. § 112, second paragraph.

We conclude that Appellant has shown that the Examiner erred in rejecting claim 15 under 35 U.S.C. § 112, second paragraph.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–6, 9–20	101	Eligibility	1–6, 9–20	
1–6, 9–20	112, first paragraph	Written Description		1–6, 9–20
1–6, 15	112, second paragraph	Indefiniteness	1–6	15
Overall Outcome			1–6, 9–20	

TIME PERIOD FOR RESPONSE

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

AFFIRMED