



# 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. |
|---|-------------|----------------------|---------------------|------------------|
| 12/638,847  | 12/15/2009  | Jun Hua              | 35006-673001US      | 5789             |
| 76615   | 7590        | 11/19/2019           | EXAMINER            |                  |
| Mintz Levin/Fair Isaac<br>Mintz Levin Cohn Ferris Glovsky and Popeo, P.C.<br>One Financial Center<br>Boston, MA 02111 |             |                      | LE, LINH GIANG      |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 3686                |                  |
|   |             |                      | NOTIFICATION DATE   | DELIVERY MODE    |
|   |             |                      | 11/19/2019          | 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):

IPDocketingBOS@mintz.com  
IPFilerombos@mintz.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* JUN HUA, HUI ZHU, CATHERINE V. ORATE-POTT,  
DAVID SHELLENBERGER,  
DEONADAYALAN NARAYANASWAMY, and  
NIRANJAN A. SHETTY

---

Appeal 2019-000048  
Application 12/638,847  
Technology Center 3600

---

Before JOSEPH L. DIXON, JUSTIN BUSCH, and CATHERINE SHIANG,  
*Administrative Patent Judges.*

SHIANG, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1, 3, 4, 6–8, 10–15, and 19–24, which are all the claims pending and rejected in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

---

<sup>1</sup> We use “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies Fair Isaac Corporation as the real party in interest. Appeal Br. 2.

## STATEMENT OF THE CASE

### *Introduction*

The present invention relates to “techniques for predicting medication adherence.” Spec. ¶ 2.

In one aspect, data characterizing an individual is received. Thereafter, one or more variables are extracted from the data so that a likelihood of the individual adhering to a treatment regimen can be determined using a predictive model populated with the extracted variables. The predictive model is trained on historical treatment regimen adherence data empirically derived from a plurality of subjects. Thereafter, data characterizing the determined likelihood of adherence can be promoted.

Spec. ¶ 4. Claim 1 is exemplary:

1. A computer-implemented method comprising:  
receiving, using one or more processors, data characterizing an individual;  
extracting, using one or more processors and by identifying one or more treatment adherence patterns in the data, one or more extracted variables from the data, the one or more extracted variables comprising a combination formed by combining a plurality of variables selected from a purchase behavior of the individual, an income of the individual, a credit risk of the individual, and a geographic region of the individual, the one or more processors performing the combining of the plurality of variables when the formed combination yields an improved correlation of the combination with a treatment regimen relative to a correlation of any single variable of the plurality of variables with the treatment regimen;  
determining, using one or more processors and using a predictive model populated with the extracted variables, a likelihood of the individual adhering to the treatment regimen, the predictive model being trained on historical treatment regimen adherence data empirically derived from a plurality of subjects, the predictive model being at least one of a neural network model and a support vector machine model, the

historical treatment regimen adherence data being temporarily stored in a database operably coupled to the one or more processors;

generating, using one or more processors, a treatment score indicative of the likelihood of adherence to the treatment regimen by the individual, the treatment score lying within a range of treatment scores of a plurality of ranges of treatment scores;

automatically generating, using one or more processors and based on the treatment score, a set of messages specific to the range of treatment scores that includes the generated treatment score to provide sequential guidance to the individual to increase the likelihood of adherence to the treatment regimen by the individual, each message of the set of messages specifying at least one action that the individual should perform to adhere to the treatment regimen, each range of treatment scores being associated with a separate set of one or more messages; and

automatically transmitting, using one or more processors, the set of messages sequentially to a computing device associated with the individual and initiating the computing device to display each message of the set of messages to the individual via a graphical user interface.

### *Rejection<sup>2</sup>*

Claims 1, 3, 4, 6–8, 10–15, and 19–24 are rejected under 35 U.S.C. § 101 because they are directed to patent-ineligible subject matter. Final Act. 2–8.

---

<sup>2</sup> Throughout this opinion, we refer to the (1) Final Office Action dated October 18, 2017 (“Final Act.”); (2) Appeal Brief dated April 18, 2018 (“Appeal Br.”); (3) Examiner’s Answer dated August 1, 2018 (“Ans.”); and (4) Reply Brief dated October 1, 2018 (“Reply Br.”).

ANALYSIS<sup>3</sup>

35 U.S.C. § 101

Section 101 of the Patent Act provides “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 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. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (internal quotation marks and citation omitted).

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

---

<sup>3</sup> To the extent Appellant advances new arguments in the Reply Brief without showing good cause, Appellant has waived such arguments. *See* 37 C.F.R. § 41.41(b)(2).

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, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. (15 How.) 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.* (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.”).

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.* (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.*

In January 2019, the United States Patent and Trademark Office published revised guidance on the application of § 101. USPTO, 2019 REVISED PATENT SUBJECT MATTER ELIGIBILITY GUIDANCE, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Guidance”).<sup>4</sup> 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) (Step 2A, Prong 1); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* Manual Of Patent Examining Procedure (“MPEP”) § 2106.05(a)–(c), (e)–(h)) (9th ed. rev. 08.2017 2018) (Step 2A, Prong 2).

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

---

<sup>4</sup> The Guidance was updated in October 2019.

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. (Step 2B.)

See Guidance, 84 Fed. Reg. at 54–56.

Turning to Step 2A, Prong 1 of the Guidance, claim 1 (with emphases) recites:

1. A computer-implemented method comprising:  
*receiving, using one or more processors, data characterizing an individual;*  
*extracting, using one or more processors and by identifying one or more treatment adherence patterns in the data, one or more extracted variables from the data, the one or more extracted variables comprising a combination formed by combining a plurality of variables selected from a purchase behavior of the individual, an income of the individual, a credit risk of the individual, and a geographic region of the individual, the one or more processors performing the combining of the plurality of variables when the formed combination yields an improved correlation of the combination with a treatment regimen relative to a correlation of any single variable of the plurality of variables with the treatment regimen;*  
*determining, using one or more processors and using a predictive model populated with the extracted variables, a likelihood of the individual adhering to the treatment regimen, the predictive model being trained on historical treatment regimen adherence data empirically derived from a plurality of subjects, the predictive model being at least one of a neural network model and a support vector machine model, the historical treatment regimen adherence data being temporarily stored in a database operably coupled to the one or more processors;*  
*generating, using one or more processors, a treatment score indicative of the likelihood of adherence to the treatment regimen by the individual, the treatment score lying within a range of treatment scores of a plurality of ranges of treatment scores;*

automatically *generating*, using one or more processors and *based on the treatment score, a set of messages specific to the range of treatment scores that includes the generated treatment score to provide sequential guidance to the individual to increase the likelihood of adherence to the treatment regimen by the individual, each message of the set of messages specifying at least one action that the individual should perform to adhere to the treatment regimen, each range of treatment scores being associated with a separate set of one or more messages; and*

automatically transmitting, using one or more processors, the set of messages sequentially to a computing device associated with the individual and initiating the computing device to display each message of the set of messages to the individual via a graphical user interface.

Because all of the italicized functions can be performed by a human using a pen and paper, they are like the mental processes in *CyberSource* and *Synopsys*. See *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372–73 (Fed. Cir. 2011) (“All of claim 3’s method steps can be performed in the human mind, or by a human using a pen and paper. . . . Such a method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101.”); *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1146 (Fed. Cir. 2016) (“[W]e continue to ‘treat[ ] 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.’”) (citation omitted).

For example, a person can “receiv[e] . . . data characterizing an individual” on paper. Further,

extracting . . . by identifying one or more treatment adherence patterns in the data, one or more extracted variables from the data, the one or more extracted variables comprising a

combination formed by combining a plurality of variables selected from a purchase behavior of the individual, an income of the individual, a credit risk of the individual, and a geographic region of the individual, . . . performing the combining of the plurality of variables when the formed combination yields an improved correlation of the combination with a treatment regimen relative to a correlation of any single variable of the plurality of variables with the treatment regimen

extracts data and combines variables when a certain condition is met, and a person can perform that data analysis by using a pen and paper. Likewise, “determining . . . using a predictive model populated with the extracted variables, a likelihood of the individual adhering to the treatment regimen, the predictive model being trained on historical treatment regimen adherence data empirically derived from a plurality of subjects” determines likelihood of adherence using a predictive model, and a person can perform that data prediction analysis using a pen and paper. In particular, a person can train a predictive model, such as a formula, based on historical data by inserting the historical data into the predictive model and obtaining the results using a pen and paper. And a person can populate the predictive model, such as a formula, by inserting the variables into the predictive model using a pen and paper.

Further, a person can use paper to “temporarily store[]” “the historical treatment regimen adherence data” and discard the information afterwards. In addition, “generating . . . a treatment score indicative of the likelihood of adherence to the treatment regimen by the individual, the treatment score lying within a range of treatment scores of a plurality of ranges of treatment scores” generates a treatment score within a range of scores, and a person

can analyze the data to derive that score by using a pen and paper. Further, claim 1 requires

generating, . . . based on the treatment score, a set of messages specific to the range of treatment scores that includes the generated treatment score to provide sequential guidance to the individual to increase the likelihood of adherence to the treatment regimen by the individual, each message of the set of messages specifying at least one action that the individual should perform to adhere to the treatment regimen, each range of treatment scores being associated with a separate set of one or more messages,

and a person can generate a set of messages and write the messages using a pen and paper.

Our determination is supported by the Specification, which describes the need for analyzing data to predict adherences to medical treatments and treatment regimes, and the resulting method for performing such data analysis. *See, e.g.*, Spec. ¶¶ 3–10.

Appellant argues:

Claim 1 includes, among other things, the following features:

- populating a predictive model with variables;
- using the predictive model to determine a likelihood of the individual adhering to the treatment regimen;
- training the predictive model on historical treatment regimen adherence data . . . .

It is respectfully submitted that these features cannot lie within the human mind, and therefore are not mental steps.

Appeal Br. 16; *see also* Reply Br. 8.

Appellant's arguments are unpersuasive, as Appellant has not explained why a person cannot perform such steps using a pen and paper.

To the contrary and as discussed above, a person can perform all of those steps using a pen and paper. As a result, we conclude claim 1 recites mental processes, and thus an abstract idea. *See* Guidance, Step 2A, Prong 1 (Groupings of Abstract Ideas).

Turning to Step 2A, Prong 2 of the Guidance, contrary to Appellant’s assertions (Appeal Br. 16–22; Reply Br. 6–17), claim 1 does not recite additional elements that integrate the judicial exception into a practical application. Appellant’s argument that “combining at least two variables when the treatment regimen yields an improved correlation with (that is, has more interdependence with) the combined variable than with each of the at least two variables - this function is an improvement” and “as a result of the improved correlation, the predictive model can generate a more accurate value of the likelihood of the individual adhering to the treatment regimen” (Appeal Br. 18; *see also* Reply Br. 9, 12, 16) is unpersuasive because as discussed above, that limitation recites a mental process, as a person can perform that data analysis using a pen and paper. *See Synopsys*, 839 F.3d at 1151 (“a claim for a *new* abstract idea is still an abstract idea”); *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1376 (Fed. Cir. 2016) (“under 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”) (citations omitted).

Further, the Supreme Court guides: “the prohibition against patenting abstract ideas ‘cannot be circumvented by . . . adding []insignificant post solution activity.’” *Bilski*, 561 U.S. at 610–611 (citation omitted). The limitation “automatically transmitting, using one or more processors, the set

of messages sequentially to a computing device associated with the individual and initiating the computing device to display each message of the set of messages to the individual via a graphical user interface” merely transmits the resulting information from mental processes to a known computing device and displays such information on a known graphic user interface of the known computing device. Therefore, we conclude the limitation “adds insignificant extra-solution activity to” the mental processes and does not “transform an unpatentable principle into a patentable process.” *See Flook*, 437 U.S. at 590 (“the presence of specific ‘post-solution’ activity—the adjustment of the alarm limit to the figure computed according to the formula” does not “transform an unpatentable principle into a patentable process”); *Guidance*, 84 Fed. Reg. at 55.

Appellant cites *Core Wireless Licensing S.A.R.L. v. LG Electronics, Inc.*, 880 F.3d 1356 (Fed. Cir. 2018) (Reply Br. 11–12, 16–17), but does not persuasively argue why that case is on point. In *Core Wireless*, the Court determines:

*The asserted claims in this case are directed to an improved user interface for computing devices . . . . Claim 1 of the ’476 patent requires “an application summary that can be reached directly from the menu,” specifying a particular manner by which the summary window must be accessed. The claim further requires the application summary window list a limited set of data, “each of the data in the list being selectable to launch the respective application and enable the selected data to be seen within the respective application.” This claim limitation restrains the type of data that can be displayed in the summary window. Finally, the claim recites that the summary window “is displayed while the one or more applications are in an un-launched state,” a requirement that the device applications exist in a particular state. These limitations disclose a specific manner of displaying a limited set of information to the user,*

*rather than using conventional user interface methods to display a generic index on a computer. Like the improved systems claimed in Enfish, Thales, Visual Memory, and Finjan, these claims recite a specific improvement over prior systems, resulting in an improved user interface for electronic devices.*

The specification confirms that these claims disclose an improved user interface for electronic devices, particularly those with small screens. It teaches that the prior art interfaces had many deficits relating to the efficient functioning of the computer, requiring a user “to scroll around and switch views many times to find the right data/functionality.” ’020 patent at 1:47–49. Because small screens “tend to need data and functionality divided into many layers or views,” *id.* at 1:29–30, prior art interfaces required users to drill down through many layers to get to desired data or functionality. *Id.* at 1:29–37. That process could “seem slow, complex and difficult to learn, particularly to novice users.” *Id.* at 1:45–46.

*Core Wireless Licensing*, 880 F.3d at 1362–63 (emphases added).

Unlike the claims of *Core Wireless*, claim 1 does not address the problem of “prior art interfaces . . . deficits relating to the efficient functioning of the computer, requiring a user ‘to scroll around and switch views many times to find the right data/functionality’” or similar problems. *Id.* at 1363. Nor is claim 1 “directed to an improved user interface for computing devices” or similar improvements. *Id.* at 1362. In particular, Appellant’s argument about the “improved correlation” (Appeal Br. 18; Reply Br. 9, 12, 16) is unpersuasive: as discussed above, that process is a mental process and thus constitutes an abstract idea. And Appellant’s assertion that “temporary” storage of data constitutes a computer improvement (Appeal Br. 18, 20; Reply Br. 9, 12, 16) is unpersuasive, as Appellant does not provide sufficient objective evidence to support the

assertion. *See In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997) (“attorney argument [is] not the kind of factual evidence that is required to rebut a prima facie case of obviousness”); *Meitzner v. Mindick*, 549 F.2d 775, 782 (CCPA 1977) (“Argument of counsel cannot take the place of evidence lacking in the record.”). Therefore, *Core Wireless* is inapplicable here.

Appellant argues this case is different from *Electric Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) because:

claim 1 teaches:

- technical means of one or more processors, a predictive model, a computing device, and a graphical user interface; and
- functions that are arguably an advance over conventional computer technology, including:
  - combining at least two variables when the treatment regimen yields an improved correlation with (that is, has more interdependence with) the combined variable than with each of the at least two variables - this function is an improvement over conventional computer technology because as a result of the improved correlation, the predictive model can generate a more accurate value of the likelihood of the individual adhering to the treatment regimen; and
  - the storage of the historical treatment regimen adherence data being temporary — this is an improvement over conventional computer technology because as a result of the temporariness, memory space is conserved, which in turn increases the speed of computing the likelihood of the individual adhering to the treatment regimen.

Appeal Br. 18; *see also* Reply Br. 8–9.

Appellant’s arguments are unpersuasive, as Appellant has not persuasively explained why the claim becomes patent eligible by reciting known computer components and devices (processors, a computing device,

and a graphical user interface), and a predictive model that a person can implement using a pen and paper. Further, as discussed above, Appellant's arguments about "improved correlation" and "temporary" storage of data (Appeal Br. 18; Reply Br. 9) are unpersuasive, as Appellant has not shown such features are indeed "improvement[s]" of "computer technology" (Appeal Br. 18).

Appellant also argues this case is different from *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1095 (Fed. Cir. 2016) because:

*FairWarning* claim 1 does not identify the tool that performs the steps recited in claim 1, and therefore it can be inferred that the above-noted features are performed by a human mind and that claim 1 recites an idea of itself. For example, nowhere does that claim 1 recite that the steps recited therein are activated by one or more processors, much less claim 1 identifying the tool on which the claimed notification is presented. The Federal Circuit points this deficiency and expressly notes it as a reason for claim 1 being patent-eligible, as noted in the following: "And we have found that 'merely presenting the results of abstract processes of collecting and analyzing information, without *more* (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis.'"

In contrast to the above-noted claim in *FairWarning*, pending claim 1 expressly identifies one or more processors, a predictive model, a computing device, and a graphical user interface as the *particular tools* for executing the subject matter recited in pending claim 1. Therefore, claim 1 is distinct from the representative claim (reproduced above) in *FairWarning*, and as per the rationale in *FairWarning* pending claim 1 is not an idea of itself.

Appeal Br. 19 (footnote omitted); *see also* Reply Br. 10.

Appellant mischaracterizes *FairWarning*, because the

*FairWarning* court determined “the claims require the use of a computer”:

FairWarning’s claims merely implement an old practice in a new environment. . . . *Although FairWarning’s claims require the use of a computer*, it is this incorporation of a computer, *not* the claimed rule, that purportedly “improve[s] [the] existing technological process” by allowing the automation of further tasks.

*FairWarning IP*, 839 F.3d at 1094–95 (emphasis added).

Similar to the claims of *FairWarning*, claim 1 is “not directed to an improvement in the way computers operate” and “the focus of the claims is not on . . . an improvement in computers as tools, but on certain independently abstract ideas that use computers[, processors, and a graphic user interface<sup>5</sup>] as tools.” *FairWarning*, 839 F.3d at 1095.

As a result, we conclude claim 1 does not recite additional elements that integrate the judicial exception into a practical application. *See* Guidance, Step 2A, Prong 2.

Turning to Step 2B of the Guidance, Appellant does not persuasively argue any specific limitation is not well-understood, routine, or conventional in the field. Nor does Appellant persuasively argue the Examiner erred in that aspect. In particular, Appellant’s argument about the absence of any prior art rejection (Reply Br. 13, 17) is unpersuasive, because prior art rejections are determined under 35 U.S.C. § 102 and § 103, which are a different statutory requirements. As the Supreme Court emphasizes: “[t]he ‘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

---

<sup>5</sup> As discussed above, a person can implement “a predictive model” using a pen and paper.

within the § 101 categories of possibly patentable subject matter.” *Diehr*, 450 U.S. at 188–89 (emphasis added). Our reviewing court further guides that “[e]ligibility and novelty are separate inquiries.” *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1340 (Fed. Cir. 2017). As a result, Appellant has not persuaded us the Examiner erred with respect to the Guidance’s Step 2B analysis. *See* Guidance, Step 2B.<sup>6</sup>

Because Appellant has not persuaded us the Examiner erred, we sustain the Examiner’s rejection of claim 1 under 35 U.S.C. § 101.

For similar reasons, we affirm the Examiner’s rejection of claims 3, 4, 6–8, 10–15, and 19–24, as Appellant does not advance separate substantive arguments about those claims. *See* 37 C.F.R. § 41.37(c)(1)(iv).

## CONCLUSION

We affirm the Examiner’s decision rejecting claims 1, 3, 4, 6–8, 10–15, and 19–24 under 35 U.S.C. § 101.

In summary:

---

<sup>6</sup> Each of the terms “neural network” model and “support vector machine” model only appears in the Specification once, and the Specification does not further describe such terms. *See* Spec. ¶ 37 (“[t]he underlying predictive model can use a variety of predictive technologies, including, for example, neural networks, support vector machines, and the like”). Appellant does not argue the claimed “neural network” and “support vector machine” models were not well-understood, routine, or conventional in the field.

| <b>Claims Rejected</b>     | <b>35 U.S.C. §</b> | <b>Basis</b>               | <b>Affirmed</b>            | <b>Reversed</b> |
|----------------------------|--------------------|----------------------------|----------------------------|-----------------|
| 1, 3, 4, 6–8, 10–15, 19–24 | 101                | Subject Matter Eligibility | 1, 3, 4, 6–8, 10–15, 19–24 |                 |

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). *See* 37 C.F.R. § 41.50(f).

**AFFIRMED**