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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JORN OP DEN BUIJS and STEFFEN CLARENCE PAUWS

Appeal 2019-003646
Application 14/205,399
Technology Center 3600

Before RICHARD M. LEBOVITZ, JEFFREY N. FREDMAN and JAMIE T. WISZ, *Administrative Patent Judges*.

LEBOVITZ, *Administrative Patent Judge*.

DECISION ON APPEAL

The Examiner rejected the claims under 35 U.S.C. § 101 as lacking patent-eligibility. Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the Examiner's decision to reject the claims. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

[1] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Koninklijke Philips N.V. Appeal Br. 1.

STATEMENT OF THE CASE

Claims 1, 3, 4, 9–12, 18, and 20–22 stand finally rejected by the Examiner under 35 U.S.C. § 101 as directed to a judicial exception to patent eligibility. Final Act. 2.

Claim 1, which is representative, is reproduced below (bracketed numbering has been added for reference to the specific limitations in the claim):

> 1. A method for population health management, the method comprising:
>
> [1] with at least one processor of a clinical decision support system, retrieving patient data associated with one or more patients;
>
> [2] with the at least one processor, retrieving one or more chronic disease management (CDM) programs applicable to each patient based on the patient data;
>
> [3] with the at least one processor, retrieving a health effect and cost for each of the applicable one or more CDM programs, the health effect including survival rate, hospitalization rate, risk of a fall, risk of ambulance transport to the emergency department, quality of life, and quality of life adjusted survival; and the cost including disease management program costs, ambulance service costs, emergency department costs, hospitalization costs, medication costs, general practitioner costs, and costs related to workflow;
>
> [4] with the at least one processor, computing a cost-effectiveness ratio for each of the one or more CDM programs from the retrieved patient data, the retrieved one or more CDM programs, and the retrieved health effect and cost of the retrieved CDM programs;
>
> [5] with the at least one processor, removing CDM programs with a cost-effectiveness ratio less than zero;
>
> [6] with the at least one processor, sorting the one or more CDM programs by their cost effectiveness ratio;
>
> [7] with the at least one processor, determining which combination of the one or more CDM programs are within budget;

> [8] with the at least one processor, not recommending one or more CDM programs that are not within budget;
>
> [9] with the at least one processor, recommending a remaining CDM program with a largest health effect and within a determined budget for each patient, the recommended CDM program having a smaller cost-effectiveness ratio relative to the other retrieved CDM programs; and
>
> [10] with the at least one processor, controlling a display to display the recommended CDM program for the one or more patients.

Principles of Law

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." However, not every discovery is eligible for patent protection. *Diamond v. Diehr*, 450 U.S. 175, 185 (1981). "Excluded from such patent protection are laws of nature, natural phenomena, and abstract ideas." *Id.* The Supreme Court articulated a two-step analysis to determine whether a claim falls within an excluded category of invention. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014); *Mayo Collaborative Servs. v. Prometheus Labs, Inc.*, 566 U.S. 66, 75–77 (2012).

In the first step, it is determined "whether the claims at issue are directed to one of those patent-ineligible concepts." *Alice*, 573 U.S. at 217. If it is determined that the claims are directed to an ineligible concept, then the second step of the two-part analysis is applied in which it is asked "[w]hat else is there in the claims before us?" *Id.* The Court explained that this step involves:

> a 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.'

Alice, 573 U.S. at 217–18 (citing from *Mayo*, 566 U.S. at 75–77).

Alice, relying on the analysis in *Mayo* of a claim directed to a law of nature, stated that in the second part of the analysis, "the elements of each claim both individually and 'as an ordered combination'" must be considered "to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Alice*, 573 U.S. at 217.

The PTO has published revised guidance on the application of 35 U.S.C. § 101. USPTO's January 7, 2019 Memorandum, *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50, 51–57 (2019) ("Eligibility Guidance"). This guidance provides additional direction on how to implement the two-part analysis of *Mayo* and *Alice*.

Step 2A, Prong One, of the 2019 Eligibility Guidance, looks at the specific limitations in the claim to determine whether the claim recites a judicial exception to patent eligibility. In Step 2A, Prong Two, the claims are examined to identify whether there are additional elements in the claims that integrate the exception in a practical application, namely, is there a "meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception." 84 Fed. Reg. 54 (2. Prong Two).

If the claim recites a judicial exception that is not integrated into a practical application, then as in the *Mayo/Alice* framework, Step 2B of the Eligibility Guidance instructs us to determine whether there is a claimed inventive concept to ensure that the claims define an invention that is significantly more than the ineligible concept, itself. 84 Fed. Reg. 56. In making this determination, we must consider whether there are specific

limitations or elements recited in the claim "that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present" or whether the claim "simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception, indicative that an inventive concept may not be present." 84 Fed. Reg. 56 (footnote omitted).

With these guiding principles in mind, we proceed to determine whether the claimed subject matter in this appeal is eligible for patent protection under 35 U.S.C. § 101.

DISCUSSION

Claim 1 recites a "method for population health management." Following the first step of the *Mayo* analysis, we find that the claim is directed to a method, and therefore falls into one of the broad statutory categories of patent-eligible subject matter under 35 U.S.C. § 101. We thus proceed to Step 2A, Prong One, of the Eligibility Guidance.

Step 2A, Prong One

In Step 2A, Prong One, of the Eligibility Guidance, the specific limitations in the claim are examined to determine whether the claim recites a judicial exception to patent eligibility, namely whether the claim recites an abstract idea, law of nature, or natural phenomenon

The Examiner found that the claims are directed to the abstract idea of recommending a treatment plan to a patient. Final Act. 2. The Examiner further found the claims are directed to the abstract idea of organizing human activity because they recite "a fundamental economic practice (i.e.

because it mitigates risk by calculating the cost-effectiveness ratio for each plan and recommends a plan in light of budget considerations) and/or manages personal behavior (i.e. following rules or instructions regarding which plan should be chosen)." Ans. 3.

The claimed method, performed with "at least one processor," comprises [1] retrieving patient data and [2] "retrieving one or more chronic disease management (CDM) programs applicable to each patient based on the patient." The Specification explains that CDM "is a systematic approach for coordinating health care interventions and communication at the individual, organizational, regional or national level." Spec. 1:16–18. The Specification states that CDMs "incorporate the coordination of health care, pharmaceutical or social interventions designed to improve outcomes." Spec. 1:22–23.

Step [3] of the claim is "retrieving a health effect and cost for each of the applicable one or more CDM programs." In step [4], a cost-effectiveness ratio is calculated for each of CDM programs. In the subsequent steps, CDM programs with a cost-effectiveness ratio less than zero are removed (step [5]) and sorted by their cost-effectiveness ratio (step [6]). The method determines which CDM programs are within budget (step [7]) and doesn't recommend those which are not within budget [step [8]). Finally, the method [9] recommends a remaining CDM program "with a largest health effect and within a determined budget for each patient, the recommended CDM program having a smaller cost-effectiveness ratio relative to the other retrieved CDM programs." The recommendation is displayed in step [10].

The claimed method therefore, as concluded by the Examiner, calculates "the cost-effectiveness ratio for each plan and recommends a plan in light of budget considerations." Ans. 3. The method organizes human activity, as found by the Examiner, because the steps in the claim recite "a fundamental economic practice (i.e. because it mitigates risk by calculating the cost-effectiveness ratio for each plan and recommends a plan in light of budget considerations) and/or manages personal behavior (i.e. following rules or instructions regarding which plan should be chosen)." Final Act. 3. Steps [1]–[3] involve data collection (retrieving patient and program data) and steps [4]–[8] enable the recommendation of the CDM program and represent the abstract idea. Appellant in the Appeal Brief did not identify a defect in the Examiner's finding that the claim recites the abstract of organizing human activity.

The steps of the claimed method also comprise mental processes, which is another one of the three categories of abstract ideas listed in the 2019 Eligibility Guidance. Eligibility Guidance, 84 Fed. Reg. 52. Specifically, steps [5]–[9] of claim 1 could all be performed in the human mind because a human, without the aid of the computer, could remove the programs with a cost-effectiveness ratio less than zero (step [5]), sort the programs by their cost effectiveness ratio (step [6]), determine programs within budget (step [7]), not recommend programs that are not within budget (step [8]), and recommend a program with "a largest health effect and within a determined budget for each patient, the recommended CDM program having a smaller cost-effectiveness ratio relative to the other retrieved CDM programs."

Appellant states that the Examiner "incorrectly defines abstract idea." Appeal Br. 9. Appellant argues that "the present claims do no[t] claim an end result, but rather claim only a limited and specific apparatus or method for achieving the end result, hence are not directed to an abstract idea." *Id.* at 10. Appellant also argues that the claims are performed with hardware and computer operations. *Id.*

A claim can recite a specific manner of achieving an end result, and still be classified as an abstract idea. For instance, a claim can recite a *specific* mathematical formula and still be ineligible for a patent under § 101. In *Parker v. Flook*, 437 U.S. 584 (1978), the claims comprised determining a new alarm base using a specific mathematical algorithm, applying the determined alarm base to update an alarm limit, and then adjusting the alarm limit to the updated value. *Id.* While the claim recited a specific mathematical algorithm for achieving the desired result, the Court concluded that the claim was ineligible for a patent under § 101 because "[t]he process itself, not merely the mathematical algorithm, must be new and useful." *Id.* at 591. Thus, reciting a specific way of achieving a desired result does not necessarily evade an eligibility rejection.

With respect to Appellant's argument that the claims use a computer processor and hardware, Appellant did not explain how executing the method on a computer makes it any less directed to an abstract idea. Appeal Br. 9–10. "The Court in *Alice* made clear that a claim directed to an abstract idea does not move into section 101 eligibility territory by 'merely requir[ing] generic computer implementation.' *Alice*, 134 S.Ct. at 2357." *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1354 (Fed. Cir. 2014).

In sum, for the foregoing reasons, we find that claim 1 recites an abstract idea. Accordingly, we proceed to Step 2A, Prong Two, of the Eligibility Guidance.

Step 2A, Prong One

Prong Two of Step 2A under the 2019 Eligibility Guidance asks whether there are additional elements that integrate the exception into a practical application. As discussed in the Eligibility Guidance, "[a] claim that integrates a judicial exception in a practical application will apply, rely on, or use the judicial exception in a manner that places a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception." Eligibility Guidance, 84 Fed. Reg. 54.

Integration into a practical application is evaluated by identifying whether there are *additional elements* individually, and in combination, which go beyond the judicial exception. *Id.* at 54–55. As explained in the October 2019 Update to Subject Matter Eligibility[2] "first the specification should be evaluated to determine if the disclosure provides sufficient details such that one of ordinary skill in the art would recognize the claimed invention as providing an improvement." PEG Update 12. According to the PEG Update, the "specification need not explicitly set forth the improvement, but it must describe the invention such that the improvement would be apparent to one of ordinary skill in the art." *Id.*

[2] Available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf (last accessed Nov. 15, 2019) ("PEG Update").

The Specification discloses that one of the reasons "for healthcare costs continuing to soar is that an estimated $300 billion dollars are wasted annually due to inefficient allocation of healthcare resources." Spec. 1:25–26. The Specification further discloses that the "present application is directed to a system and method to most effectively allocate healthcare resources, given individual patient risks and organizational budget constraints." Spec. 2:19–21. The Specification teaches that the method can be used by "healthcare organizations providing health care to a patient population where a selection among a variety of CDM programs or program elements must be made for each individual patient." Spec. 2:21–23. The Specification discloses that "if a care organization is constrain[ed] by a single total budget (lump sum for the whole population) and there is a distribution of costs across different programs, then there might be different subsets of programs across patients that fit within this budget by possibly trading-off some of the benefits of these programs differently." Spec. 2:25–28. The Specification teaches that the "present application addresses this issue by recommending the most effective care programs given the budget constraint." Spec. 2:28–30. The Specification describes the method as follows:

> [I]nputs patient clinical data and costs parameters and outputs a recommendation of a chronic disease management (CDM) program for each patient, such that for the entire population under consideration the largest health effect is achieved. During this recommendation, the present application utilizes predictors of the health effects and costs for all patient-CDM program combinations. The present application also takes into account monetary constraints that are applicable to the organization providing the care for the patient population under consideration.

Spec. 4:24–30.

The Specification further describes a decision support system 16 ("DSS") (Spec. 5:8–9) and a cost-health effectiveness engine of the DSS 16 to perform the method. The Specification explains:

> The DSS **16** stores clinical models and algorithms embodying the clinical support tools or patient decisions aids. The clinical models and algorithms are utilized by a recommendation engine **40** and a cost-health effectiveness engine **42** of the DSS **16** to generate one or more recommendations of a chronic disease management (CDM) program for each patient, such that for the entire population under consideration the largest health effect is achieved.

Spec. 6:22–27.

We cannot discern from reading the Specification an improvement to the cost-effectiveness analysis which places "a meaningful limit on the judicial exception" recited in claim 1. Eligibility Guidance, 84 Fed. Reg. 53. The Specification describes DDS 16 and cost-health effectiveness engine 42 to perform the analysis, which appear to comprise the software programs that enable the steps of the claimed method to be accomplished. The Specification does not explain how these "engines" improve the computer, itself, on which they perform their analytic functions. Rather, the Specification describes the engines as using "clinical models and algorithms," but does not explain how these models and algorithms change, enhance, or otherwise improve the computer which uses them in the claimed method. Spec. 6:22–27. The other description in the Specification, as discussed above, describes using budget constraints, clinical data, and cost parameters to make the CDM recommendation. Spec. 2:25–30, 4:24–30 (reproduced above). The employment of these parameters might be an improvement to how the CDM program is recommended, but as discussed in

more detail below, such improvement is to the abstract idea, itself, and not to a technological or technical field and therefore is inadequate to establish eligibility. Eligibility Guidance, 84 Fed. Reg. 55.

As discussed above, an additional element, beyond the abstract idea of identifying a recommended CDM program, is necessary to integrate the idea into a practical application. *See supra* at pp. 4, 9. The improvement described in the Specification is to how the analysis is accomplished (steps [4]–[9] (calculating cost-effectiveness ratio, etc.); the analysis recited in these steps represent the abstract idea, itself, and therefore cannot serve as the "additional element" necessary to integrate the abstract idea into a practical application.

Appellant contends that the "the claims are directed to a specific implementation of a solution to a problem." Appeal Br. 10. Appellant argues:

> In contrast, in the present case, the ability to combine the specific factors to determine the cost-effectiveness ratio for the CDM programs, in order to perform generation (of the ratios) and then to perform analysis (removing the selected CDM programs) provide "additional features" in the claims that constitute an "inventive concept," thereby rendering the claims eligible for patenting even if they are directed to an abstract idea. *Alice,* 134 S. Ct. at 2357.

Appeal Br. 12.

Appellant further argues "the claims solve the problem of how to identify a disease management program that is within a patient's budget and has a desired health effect." Appeal Br. 14. Appellant states that it "should be understood that prior to the claimed invention, existing chronic disease management programs do not explicitly consider individual patient risks and budget constraints of a health care organization." *Id.*

The problem that Appellant asserts to have solved is accomplished by following the specific steps in the claim. The question raised by Appellant's assertion is whether these steps are stated with sufficient specificity to confer eligibility on the claim. We begin with *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016) because the steps in *McRO* were determined by the court to recite sufficient specificity to avoid the judicial restrictions on patent eligibility under § 101.

In *McRO*, the claims were directed to a "method for automatically animating lip synchronization and facial expression of three-dimensional characters." *McRO*, 837 F.3d, 1307–08. The claim recited a series of steps that "produce[d] lip synchronization and facial expression control of said animated characters." *Id.* The court found that the claimed "automation goes beyond merely 'organizing [existing] information into a new form' or carrying out a fundamental economic practice." *McRO*, 837 F.3d at 1315 (citation omitted). Instead, the court found that the "claimed process uses a combined order of specific rules that renders information into a specific format that is then used and applied to create desired results: a sequence of synchronized, animated characters." *Id.* *McRO* found that the recited rules "are limiting in that they define morph weight sets as a function of the timing of phoneme sub-sequences." *McRO*, 837 F.3d at 1313. The claims were found to be directed to a "technological improvement over the existing, manual 3-D animation techniques." *McRO*, 837 F.3d at 1316.

In finding the claim patent-eligible, *McRO* noted that the "abstract idea exception has been applied to prevent patenting of claims that abstractly cover results where 'it matters not by what process or machinery the result is accomplished.' [*O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 113,]; see also

Mayo, 132 S.Ct. at 1301." *McRO*, 837 F.3d at 1314. *McRO* stated that therefore, a court must "look to whether the claims in these patents 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.

Here, the claimed steps recite the desired result, but not with enough specificity that would deter preemption of the abstract idea recited in claim 1. In *McRO*, the court held that the "limitations in claim 1 prevent preemption of all processes for achieving automated lip-synchronization of 3–D characters." *McRO*, 837 F.3d at 1315. The court explained that "[t]he specific structure of the claimed rules would prevent broad preemption of all rules-based means of automating lip synchronization." *Id.* In contrast, the steps in rejected claim 1 are recited in general terms, namely, "computing a cost-effectiveness ratio" (step [4]), "removing CDM programs with a cost-effectiveness ratio less than zero" (step [5]), "sorting the one or more CDM programs by their cost effectiveness ratio" (step [6]), "determining which combination of the one or more CDM programs are within budget" (step [7]), "not recommending one or more CDM programs that are not within budget" (step [8]), and "recommending a remaining CDM program with a largest health effect and within a determined budget for each patient" (step [9]). Unlike *McRO*, none of these steps recite how the result is achieved or how they are implemented in a specific manner.

Step [4], in which the health effects and risks for the individual patient and the costs are used to compute a cost-effectiveness ratio, does not specifically identify how the ratio is determined. While the factors recited in step [4] to calculate the ratio may be new or unique, as alleged by Appellant,

the step does not recite how they factors are specifically employed to compute "a cost-effectiveness ratio for each of the one or more CDM programs." Thus, only the end result of the computation is recited in the claim, and not how to accomplish the computation. Compare *McRO* which found the recited rules to be "limiting in that they define morph weight sets as a function of the timing of phoneme sub-sequences." *McRO*, 837 F.3d at 1313.

Steps [1]–[3] comprise data collection and step [10] implements the display of the CDM recommendation. Appellant did not assert these steps invoke a technological or technical improvement to a field. We find that each of these steps involve "insignificant extra-solution activity which the courts have found insufficient to integrate the judicial exception into a practical application. Eligibility Guidance, 4 Fed. Reg. 55.

Appellant cites *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014) to support the contention that the claims are patent eligible. Appeal Br. 14. In *DDR*, the claims were directed to an "e-commerce outsourcing system "to serve a composite web page to the visitor computer wit[h] a look and feel based on the look and feel description in the data store and with content based on the commerce object associated wit[h] the link." *DDR*, 773 F.3d at 1249. The court found the claims to be patent eligible:

> [T]hese claims stand apart because they 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.

The rejected claims here are not "necessarily rooted in computer technology" as they were in *DDR*. The steps in the claim are performed on a computer processor, but the steps do not address a problem that improves the computer processor which carries out the method. Rather, the problem is addressed by following steps that comprise computing a cost-effectiveness ratio, taking into account a number of specific factors. Appellant did not adequately explain how such steps improve the computer technology on which the method is performed.

There are several court cases in which claims were found to be eligible when computer function was improved. *See, e.g., Enfish, LLC v. Microsoft Corp*., 822 F.3d 1327 (Fed. Cir. 2016); *Finjan, Inc. v. Blue Coat Sys.*, 879 F.3d 1299 (Fed. Cir. 2018); *Core Wireless Licensing S.A.R.L. v. LG Electronics, Inc*., 880 F.3d 1356 (Fed. Cir. 2018). But none of the blaze marks of eligibility found in these cases are present here because the claimed method does not impart a change to how the computer is used or to how the computer operates.

Appellant also argues that the recommended CDM program is used to "treat" a patient which is practical application. Reply Br. 5. This argument is not persuasive. The last step of claim 1 is [10] "controlling a display to display the recommended CDM program for the one or more patients." There is no requirement in the claim that the displayed program is applied to the treatment of a patient. Unlike *Vanda*, there is no drug administration step. *Vanda Pharm. Inc. v. West-Ward Pharm. Int. Ltd*., 887 F.3d 1117, 1121 (Fed. Cir. 2018). The instant claim does not even specify what that treatment would be. Consequently, we find this argument unavailing.

In sum, we have not been guided to an additional element in the

claim, beyond the abstract idea, that integrates the judicial exception in practical application. The improvement is to the abstract idea, itself, and not to the function of a technology or technical field. Eligibility Guidance, 84 Fed. Reg. 55.

Step 2B

Because we determined that the judicial exception is not integrated into a practical application, we proceed to Step 2B of the Eligibility Guidelines, which asks whether there is an inventive concept. In making this Step 2B determination, we must consider whether there are specific limitations or elements recited in the claim "that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present" or whether the claim "simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception, indicative that an inventive concept may not be present." Eligibility Guidance, 84 Fed. Reg. 56 (footnote omitted). We must also consider whether the combination of steps perform "in an unconventional way and therefore include an 'inventive step,' rendering the claim eligible at Step 2B." *Id.* In this part of the analysis, we consider "the elements of each claim both individually and 'as an ordered combination'" to determine "whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Alice*, 573 U.S. at 217.

Appellant has not established that the claims, when considered as an ordered combination, provide "inventive" step. Step [4] of computing the cost-effectiveness ratio is not performed any differently in combination with

the additional limitations recited in the claim. Steps [1], [2], and [3] involve retrieving data that is used in [4] for computing the cost effectiveness ratio. Neither the Specification nor Appellant has identified anything in these steps alone, or as an ordered combination, that retrieves the data in a non-conventional, inventive way. The subsequent steps in the claim, culminating in the CDM program recommendation, represent the abstract idea. Appellant has not explained how the combination of steps operates in a non-conventional way to achieve the stated purpose of a CDM recommendation.

The "improvement" to the computation of the cost-effectiveness ratio is deficient for the same reason as was the method for updating alarms in *Flook*, namely, there must be an "inventive" *application* of the algorithm to confer subject matter eligibility under § 101. *Flook*, 437 U.S. at 594.

Accordingly, we conclude that claim 1 does not provide an inventive step.

Summary

For the foregoing reasons, the rejection of claim 1 based on 35 U.S.C. § 101 is affirmed. Claims 3, 4, 7, 9–12, 18, and 20–22 were not argued separately and therefore fall with claim 1. 37 C.F.R. § 41.37(c)(1)(iv).

CONCLUSION

In summary:

Claims Rejected	**35 U.S.C. §**	**Reference(s)/Basis**	**Affirmed**	**Reversed**
1, 3, 4, 7, 9–12, 18, 20–22	101	Eligibility	1, 3, 4, 7, 9–12, 18, 20–22	

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)(1)(iv).

AFFIRMED