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Intellectual Property Department - SLC
136 S. Main Street
Kearns Building, Suite 1000
Salt Lake City, UT 84101-1685

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BORIN, MICHAEL L

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte EDWARD K.Y. JUNG and LOWELL L. WOOD, JR.

Appeal 2013-005666
Application 12/283,158
Technology Center 1600

Before JEFFREY N. FREDMAN, ULRIKE W. JENKS, and CHRISTOPHER G. PAULRAJ, *Administrative Patent Judges*.

PAULRAJ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal[1] under 35 U.S.C. § 134 involving claims to a computer-implemented method of identifying and treating pathogen variants. The Examiner rejected the claims for indefiniteness, non-statutory subject matter, obviousness, and obviousness-type double patenting. We have jurisdiction under 35 U.S.C. § 6(b). We affirm and enter a new ground of rejection under 35 U.S.C. § 101.

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[1] Appellants identify the Real Party in Interest as Searate, LLC, an affiliate of Intellectual Ventures Management, LLC (*see* Appeal Br. 2).

STATEMENT OF THE CASE

Background

The Specification relates generally to "[m]ethods and systems [that] involve identifying primary pathogens as well as variants of the pathogens and treatments." *See* Spec. 2 (Summary).

The Claims

Claims 1, 2, 11–21, and 78–80 are under appeal, and are reproduced in the Claims Appendix of the Appeal Brief. Independent claim 1 is representative and reads as follows:

> A computer-implemented-method comprising:
> a computing device identifying a primary pathogen;
> the computing device estimating a probability of an existence of the primary pathogen in a given individual;
> identifying a primary treatment targeting the primary pathogen;
> the computing device predicting a first pathogenic variant of the primary pathogen;
> identifying a set of first variant treatments targeting the first pathogenic variant;
> the computing device predicting a second pathogenic variant of the primary pathogen; and
> identifying a set of second variant treatments targeting the second pathogenic variant.

Appeal Br. 74 (Claims App'x).

The Rejections

The Examiner has rejected the claims as follows:

I. Claims 1, 2, 11–21, and 78–80 under 35 U.S.C. § 112 ¶ 2 for indefiniteness;

II. Claims 1, 2, 11–21, and 78–80 under 35 U.S.C. § 101 as being directed to non-statutory subject matter;

III. Claims 1, 2, 11–21, and 78–80 under 35 U.S.C. § 103 as being unpatentable over Smith[2] together with Burdette[3] and Chee,[4] Armour,[5] or Holland-Staley.[6]

IV. Claims 1, 2, 11–21, and 78–80 under 35 U.S.C. § 103 as being unpatentable over Modrow[7] and Barin,[8] together with Burdette and Chee, Armour, or Holland-Staley.

V. Claims 1, 2, 11–21, and 78–80 under 35 U.S.C. § 103 as being unpatentable over Prior,[9] Smith, and Modrow, together with Burdette and Chee, Armour, or Holland-Staley.[10]

VI. Claims 1, 2, 11–21, and 78–80 for non-statutory obviousness-type double patenting as being unpatentable over Application No. 11/525,760.

VII. Claims 1, 2, 11–21, and 78–80 for non-statutory obviousness-type double patenting as being unpatentable over Application No. 12/283,128.

VIII. Claims 1, 2, 11–21, and 78–80 for non-statutory obviousness-type double patenting as being unpatentable over Application No. 12/283,184.

May 8, 2012 Non-Final Action ("Non-Final Act."), 3–32.

INDEFINITENESS REJECTIONS

1. *Mixing Method and Apparatus Limitations (Claims 1, 2, 11–21, and 78–80)*

The Examiner asserts that independent claim 1 recites a "method comprising . . . a computing device," and therefore "it is unclear which of the four categories of subject matter a claim is directed to -- process, machine, manufacture, or composition of matter." Non-Final Act. 3–4. The Examiner relies upon MPEP § 2173.05(p)(II), which states that "[a] single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph."

We are not persuaded that the claims are indefinite on this basis. The cases cited in MPEP § 2173.05(p)(II) address the situation where an apparatus claim recited method steps to be performed by a user, and not

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[2] Smith et al., *Mapping the Antigenic and Genetic Evolution of the Influenza Virus*, 305 Science 371–76 (2004) ("Smith").
[3] Burdette et al., *Killing Bugs at the Bedside: A prospective hospital survey of how frequently personal digital assistants provide expert recommendations in the treatment of infectious diseases*, 3 Annals of Clin. Microbiology and Antimicrobials 1–6 (2004) ("Burdette").
[4] Chee et al., US Patent 5,861,242, issued Jan. 19, 1999 ("Chee").
[5] Armour et al., US Patent 6,586,430 B1, issued July 1, 2003 ("Armour").
[6] Holland-Staley, Pub. No. US 2007/0172926 A1, published July 26, 2007 ("Holland-Staley").
[7] Modrow et al., *Computer-Assisted Analysis of Envelope Protein Sequences of Seven Human Immunodeficiency Virus Isolates: Prediction of Antigenic Epitopes in Conserved and Variable Regions*, 61 J. Virology 570–78 (1987) ("Modrow").
[8] Barin et al., *Virus Envelope Protein of HTLV-III Represents Major Target Antigen for Antibodies in AIDS Patients*, 228 Science 1094–96 (1985).
[9] Prior et al., Publication US 2005/0055188 A1, published Mar. 10, 1985.
[10] Although the Examiner's statement of the rejection refers to "Aguiar," the Examiner does not address any teachings of a reference by the name of Aguiar, but rather relies upon the teachings of Chee, Armour and Holland-Staley. Non-Final Act., 20. Therefore, like Appellants, we consider "the rejection as noted and commented by the Examiner in view of Chee, Armour, or Holland-Staley, rather than in view of Aguiar, assuming a typographical error." Appeal Br. 48.

merely the capability of the apparatus. *See In re Katz Interactive Call Processing Patent Litigation*, 639 F.3d 1303, 1318 (Fed. Cir. 2011) (emphasis added) (claim directed to "[a] system with an 'interface means for providing automated voice messages . . . to certain of said individual callers, *wherein said certain of said individual callers digitally enter data*'" was determined to be indefinite because the italicized claim limitation is not directed to the system, but rather to actions of the individual callers, which creates confusion as to when direct infringement occurs); *IPXL Holdings v. Amazon.com, Inc.*, 430 F.3d 1377, 1384 (Fed. Cir. 2005) (system claim that recited "an input means" and required a user to use the input means was found to be indefinite because it was unclear "whether infringement . . . occurs when one creates a system that allows the user [to use the input means], or whether infringement occurs when the user actually uses the input means.").

Unlike the situation in *Katz* and *IPXL*, the claims here are directed to a method involving the use of an apparatus (i.e., a computing device). The Federal Circuit has held that such claims are not indefinite for combining different classes of statutory subject matter. *See Microprocessor Enhancement Corp. v. Texas Instruments Inc.*, 520 F.3d 1367, 1374–75 (Fed. Cir. 2008) (claim directed to "method of executing instructions in a pipelined processor comprising: [structural limitations of the pipelined processor]" not found indefinite because "[m]ethod claim preambles often recite the physical structures of a system in which the claimed method is practiced.").

Accordingly, we do not sustain the indefiniteness rejection for mixing method and apparatus limitations.

2. "Probability of Association" (Claims 79 and 80)

The Examiner further asserts that the phrase "probability of association between . . . variant of the pathogen in the given individual" in claim 79 is not clear because it does not state what the association is "'between'" or to what the probability of association is being compared. Non-Final Act. 4. Likewise, the Examiner asserts that the phrase "estimating . . . until there is less than a 5% probability of association" in claim 80 is not clear as to "how the probability for a single individual can change just because an estimate is being calculated." *Id.*

Appellants argue that "dependent claims 79 and 80 are definite on their face" because "[t]he claims provide what is performing the act- the computing device- as well as that the act is 'estimating a probability of association'" and "[t]he claims further specify that the 'estimating' is carried out 'until there is less than a 5 percent probability of association between the at least one variant of the pathogen and the given individual.'" Appeal Br. 14–15.

We agree with the Examiner that claims 79 and 80 are indefinite as to the "probability of association" limitations. Appellants' response to the Examiner's rejection merely repeats the claim language and similar language in the Specification without explaining the methodology by which a "probability of association" is calculated. Without any such explanation identified in the claims or the Specification, a skilled artisan would not be reasonably apprised of how to estimate the probability and/or determine whether the less than 5% probability of association requirement is satisfied.

We therefore affirm the § 112 indefiniteness rejection as to claims 79 and 80. *See In re Packard*, 751 F.3d 1307, 1311 (Fed. Cir. 2014) (A § 112 indefiniteness rejection is proper "when the USPTO has initially issued a

well-grounded rejection that identifies ways in which language in a claim is ambiguous, vague, incoherent, opaque, or otherwise unclear in describing and defining the claimed invention").

NON-STATUTORY SUBJECT MATTER REJECTION

The Examiner rejected claims 1, 2, 11–21, and 78–80 under 35 U.S.C. § 101 as being drawn to non-statutory subject matter because claims are directed to a "method comprising . . . a computing device." The Examiner's rationale for this rejection is similar to the Examiner's rationale for the indefiniteness rejection based on mixing method and apparatus limitations. Non-Final Act. 5.

For the reasons stated above, we find that the claims are drawn to a statutory class of subject matter (i.e., a process). For the reasons set forth in the new ground of rejection under 35 U.S.C. § 101 below, however, we determine that the claims are nonetheless patent-ineligible because they are directed to an abstract idea.

OBVIOUSNESS REJECTIONS

The Examiner has set forth three separate obviousness rejections, each of which rely upon Burdette, Chee, Armour, or Holland-Staley, together with Smith, Modrow, Barin, and/or Prior. Non-Final Act. 8–29. For the reasons set forth below, we affirm the obviousness rejection as to claims 1, 2, 11–21, and 78 based on the teachings of Modrow, Barin, and Chee. We do not rely upon the other references as the basis for our affirmance. *See In re Kronig*, 539 F.2d 1300, 1303 (CCPA 1976) (Board may rely upon less than all the references cited by Examiner in affirming a rejection without designating a new ground). We reverse the obviousness rejections as to

claims 79 and 80, which we find indefinite as to the "probability of association" limitations for the reasons stated above.

The Examiner finds that "Modrow teaches prediction of amino acid sequences of the envelope proteins of seven different HIV strains." Non-Final Act. 16. The Examiner further finds that Barin "teaches that viral envelope proteins (gp160 and gp120) are the most consistently recognized by antibodies found in patients with acquired immune deficiency syndrome (AIDS)." *Id.* at 17. The Examiner asserts that:

> It would have been *prima facie* obvious to one skilled in the art to be motivated to identify HIV pathogenic variants of envelope glycoproteins as taught in Modrow because knowledge of such variant structures will enable detection of antibodies in patients with AIDS, as taught by Barin. Thus, identifying HIV pathogenic variants of envelope glycoproteins will allow identifying presence of the acquired humoral response (which is viewed as viewed as a "treatment targeting pathogen").

Id.

The Examiner acknowledges that "[a] combination of Modrow and Barin does not teach estimating probability of an existence of a pathogen using a computing device," but asserts that "[i]nasmuch as the step of estimating probability of existence of a virus in an individual is interpreted to encompass detecting/diagnosing the presence of a variant in an individual, such detecting/diagnosing is a routine step in determining effective antiviral therapy as exemplified by," *inter alia*, Chee. *Id.* at 17–18. The Examiner finds that Chee teaches "a DNA chip (and method of use) for diagnosing/detecting (i.e. estimating the probability of) HIV variants in patients," and "that this is important so that therapy can be changed as drug-resistant variants are detected." *Id.*

We determine that the Examiner has made a prima facie showing of obviousness of claim 1 based on the combination of Modrow, Barin, and Chee. We are not persuaded by Appellants' arguments to the contrary, which focus on the limitation of "estimating a probability of an existence of the primary pathogen in a given individual." Appeal Br. 34–47.

Although we agree with the Examiner's observation that the Specification teaches that "[e]stimating the probability of existence includes, but is not limited to, clinical differential diagnosis techniques" (Spec. 8, ll. 7–9), we do not agree with the Examiner's conclusion that the recited step is no different than simply "identifying a pathogen." Non-Final Act. 12. The claims require "estimating a probability of an existence of the primary pathogen *in a given individual*." Cl. 1 (emphasis added). Under our broadest reasonable interpretation consistent with the Specification, we determine that the claim language requires the differential diagnosis of the primary pathogen within a given individual/patient.

We nonetheless find that the Examiner has shown that at least the Chee reference suggests the disputed limitation, and, in combination with Modrow and Barin, renders the claims as a whole obvious. Chee teaches the use of an array of nucleic acid probes on biological chips for diagnosis of HIV. Chee, Title. More specifically, Chee teaches:

> [a]fter [the HIV] virus acquires drug resistance via a mutation, the patient suffers dramatically increased viral load, worsening symptoms (typically more frequent and difficult-to-treat infections), and ultimately death. Switching to a different treatment regimen as soon as a resistant mutant virus takes hold may be an important step in patient management which prolongs patient life and reduces morbidity during life.

Chee, 4:37–44. Chee further teaches:

> When the immune system in AIDS patients fails, these normally latent pathogens can grow and generate rampant infection. In treating such patients, it would be desirable simultaneously to diagnose the presence or absence of a variety of the most lethal common infections, determine the most effective therapeutic regime against the HIV virus, and monitor the overall status of the patient's infection.
>
> The present invention provides DNA chips for detecting the multiple mutations in HIV genes associated with resistance to different therapeutics. These DNA chips allow physicians to monitor mutations over time and to change therapeutics if resistance develops. Some chips also provide probes for diagnosis of pathogenic microorganisms that typically occur in AIDS patients.

Id. at 5:21–35.

The foregoing teachings of Chee suggest the following limitations recited in independent claim 1: a) "identifying a primary pathogen" (i.e., HIV); b) "estimating a probability of an existence of the primary pathogen in a given individual" (i.e., diagnosing a patient with HIV/AIDS); c) "identifying a primary treatment targeting the primary pathogen" (i.e., determining an effective therapeutic regiment against the HIV virus); d) "predicting a [first/second] pathogenic variant of the primary pathogen" (i.e., using DNA chips to monitor different mutations of HIV); and e) "identifying a set of [first/second] variant treatments targeting the [first/second] pathogenic variant" (i.e., switching to a different treatment regimen as soon as a resistant mutant virus takes hold). Contrary to Appellants' arguments, neither the claims nor the Specification require determining a numerical value (e.g., in terms of percentage) in order satisfy the "estimating a probability" requirement. We find under our claim construction that the requirement is satisfied by Chee's teachings regarding the differential diagnosis of patients infected with HIV.

A skilled artisan would have recognized that the diagnosis of HIV variants using DNA chips as taught by Chee would involve the use of a computing device. Moreover, Modrow further teaches the prediction of antigenic epitopes for the envelope proteins of seven different HIV strains using a computer, which may be used to identify vaccine/antibody candidates as potential treatment options for those HIV strains. *See* Modrow, 572 ("we predicted antigenic determinants in the amino acid sequences [of envelope protein gp120] with a computer program which predicted the secondary structure and calculated the values for hydrophilicity"); Barin, 228 (teaching that gp120 represents a major target antigen for antibodies in AIDS patients). In view of these teachings, a skilled artisan would have found it obvious to practice the claimed methods to predict HIV variants and identify treatment options for such variants. Furthermore, to the extent that the references do not explicitly teach the use of a computing device to perform any of the claimed steps, the skilled artisan would have found it obvious to implement those steps using a computer. The use of a computer to automate the steps of a known process is generally obvious. *Cf. Leapfrog Enterprises, Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) ("Accommodating a prior art mechanical device that accomplishes [the goal of teaching a child to read phonetically] to modern electronics would have been reasonably obvious to one of ordinary skill in designing children's learning devices.").

We therefore affirm the obviousness rejection of independent claim 1 in view of the teachings of Modrow, Barin, and Chee. Appellants do not provide any meaningful substantive argument regarding dependent claims 2, 11–21, and 78; rather, only asserting that those claims "are patentable by virtue of their own separate recitations as well as by virtue of being

dependent from independent claim 1." Appeal Br. 46. We accordingly determine that claims 2, 11–21, and 78 fall with claim 1. *See* 37 C.F.R. § 41.37(iv); *In re Lovin*, 652 F.3d 1349, 1357 (Fed. Cir. 2011) ("[T]he Board [has] reasonably interpreted Rule 41.37 to require more substantive arguments in an appeal brief than a mere recitation of the claim elements and a naked assertion that the corresponding elements were not found in the prior art.").

With respect to dependent claims 79 and 80, Appellants separately argue that "the Examiner failed to demonstrate that the cited references recognized the parameter of 'probability of association' as a result-effective variable." Appeal Br. 47. As discussed above, we find that the term "probability of association" is indefinite and thus we are unable to ascertain the proper scope of claims 79 and 80. In view of our inability to ascertain the proper claim scope, we cannot determine whether the prior art teaches or suggests those limitations and thus we do not reach the merits of the Examiner's rejection because these claims cannot be properly interpreted. *See In re Steele*, 305 F.2d 859, 862 (CCPA 1962) (holding that the Examiner and the Board were wrong in relying on what, at best, were speculative assumptions as to the meaning of the claims and in basing a prior-art rejection thereon)..

OBVIOUSNESS-TYPE DOUBLE PATENTING REJECTIONS

The Examiner entered obviousness-type double patenting rejections over the claims of Application Nos. 11/525,760, 12/283,128, and 12/283,184. Application No. 11/525,760 was abandoned on December 30, 2011, and therefore the Examiner's rejection based on that application is rendered moot.

The other two co-pending applications have not been abandoned and we address the merits of the rejections.

We note that Application No. 12/283,184 and the present application both claim priority as divisionals of Application No. 11/525,760 (filed Sept. 22, 2006). In view of the original restriction requirement in Application No. 11/525,760 that led to the filing of both divisional applications, the Examiner has not shown why Application No. 12/283,184 is available as a reference over the present application. An obviousness-type double patenting rejection as between the two applications is improper under 35 U.S.C. § 121, which states that:

> [a] patent issuing on an application with respect to which a requirement for restriction under this section has been made, or on an application filed as a result of such a requirement, shall not be used as a reference either in the Patent and Trademark Office or in the courts against a divisional application or against the original application or any patent issued on either of them, if the divisional application is filed before the issuance of the patent on the other application.

There has been no showing that Applicants failed to maintain consonance with the original restriction requirement. *See Gerber Garment Technology Inc. v. Lectra Systems Inc.*, 916 F.2d 683, 688 (Fed. Cir. 1990). We accordingly reverse the obviousness-type double patenting rejection over co-pending Application No. 12/283,184.

With respect to co-pending Application No. 12/283,128, which claims priority as a divisional to a different application (Application No. 11/487,133, filed July 13, 2006) and is thus available as a reference under 35 U.S.C. § 121, the Examiner asserts that "[a]lthough the conflicting claims are not identical, they are not patentably distinct from each other because the claims of 12/283128 are directed to a system comprising a processor and

computer readable medium with instructions for executing the same method steps as the instant method." Non-Final Act. 31. We agree. Contrary to Appellants' arguments (Appeal Br. 71), we find that the Examiner articulated a sufficient rationale as to why the claims of the two applications would have been obvious insofar as it would have been obvious to implement the methods recited in the instant claims on a computer system. Appellants have not pointed to any other meaningful difference between the claims. We thus affirm the obviousness-type double patenting rejection over co-pending Application No. 12/283,128.

NEW GROUND OF REJECTION

Within our authority under 37 C.F.R. § 41.50(b), we enter the following new ground of rejection.

Claims 1, 2, 11–21, and 78–80 are rejected under 35 U.S.C. § 101 as being drawn to a patent-ineligible abstract idea as set forth by the Supreme Court in *Mayo Collaborative Servs. v. Prometheus Labs.*, 132 S. Ct. 1289, 1297 (2012) ("*Mayo*") and *Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2358–59 (2014) ("*Alice*").

In accordance with the *Mayo/Alice* framework for determining patent eligibility, we must determine whether a claim that is drawn to a statutory class of subject matter (process, machine, manufacture, or composition of matter) is a) otherwise "directed to" a judicially recognized exception (i.e., law of nature, natural phenomena, or abstract idea) and, if so, b) whether the claim recites additional elements that amount to "significantly more" than the judicial exception. *See 2014 Interim Guidance on Patent Subject Matter Eligibility*, 79 Fed. Reg. 74618, 74621 (Dec. 16, 2014).

Here, although the claims are drawn to a statutory class (process), we determine that each of the claims are directed to a patent-ineligible abstract idea insofar as they are directed generally to the identification of medical treatment options for pathogen variants. *See, e.g.*, Cl. 1 (reciting steps of a) "identifying a primary pathogen"; b) "estimating a probability of an existence of the primary pathogen in a given individual"; c) "identifying a primary treatment targeting the primary pathogen"; d) "predicting a [first/second] pathogenic variant of the primary pathogen"; and e) "identifying a set of [first/second] variant treatments targeting the [first/second] pathogenic variant"). The claims do "no more than call on a 'computing device,' with basic functionality for computing stored and input data and rules, to do what doctors routinely do." *Cf. SmartGene, Inc. v. Advanced Biological Labs., SA*, 555 F. App'x 950, 954–55 (Fed. Cir. 2014) ("Whatever the boundaries of the 'abstract ideas' category, the claim at issue here involves a mental process excluded from section 101: the mental steps of comparing new and stored information and using rules to identify medical options."). The claims at issue here are not meaningfully distinguishable from those found to be ineligible for patent protection in *SmartGene*.

As recognized in *SmartGene*, the fact that a computer is used to perform the recited steps does not add "significantly more" to the abstract idea embodied in the claims. The use of a generic computer to identify information and estimate a probability simply takes advantage of some of the "most basic functions of a computer." *Cf. Alice*, 134 S. Ct. at 2359 (the "use of a computer to obtain data, adjust account balances, and issue automated instructions; all of these computer functions are 'well-understood, routine, conventional activit[ies]' previously known to the industry.") (citing *Mayo*, 132 S. Ct. at 1294); *Gottschalk v. Benson*, 409 U.S. 63, 65 (1972)

(noting that a computer "operates . . . upon both new and previously stored data").

SUMMARY

We reverse the rejection of claims 1, 2, 11–21, and 78–80 under 35 U.S.C. § 112 ¶ 2 for indefiniteness based on mixing method and apparatus limitations.

We affirm the rejection of claims 79 and 80 under 35 U.S.C. § 112 ¶ 2 as being indefinite with respect to the phrase "probability of association."

We reverse the rejection of claims 1, 2, 11–21, and 78–80 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

We affirm the rejection of claims 1, 2, 11–21, and 78 under 35 U.S.C. § 103 as being unpatentable over the combination of Modrow, Barin, and Chee. We do not reach the rejections under 35 U.S.C. § 103 as to claims 79 and 80.

We dismiss as moot the rejection of claims 1, 2, 11–21, and 78–80 for non-statutory obviousness-type double patenting as being unpatentable over Application No. 11/525,760.

We affirm the rejection of claims 1, 2, 11–21, and 78–80 for non-statutory obviousness-type double patenting as being unpatentable over Application No. 12/283,128.

We reverse the rejection of claims 1, 2, 11–21, and 78–80 for non-statutory obviousness-type double patenting as being unpatentable over Application No. 12/283,184.

We enter a new ground of rejection of claims 1, 2, 11–21, and 78–80 under 35 U.S.C. § 101 as being drawn to a patent-ineligible abstract idea.

This decision contains a new ground of rejection pursuant to

37 C.F.R. § 41.50(b) (Sept. 13, 2004; revised, 76 FR 72270, Nov. 22, 2011, effective Jan. 23, 2012). 37 C.F.R. § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 C.F.R. § 41.50(b) also provides that the Appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner.
2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record.

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; 37 C.F.R. § 41.50(b)

APJ Initials: CGP