Chief Judge David Ruschke took no part in this decision or in the designation of this decision as precedential.

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RANDAL C. SCHULHAUSER, JOHN K. DAY, SCOTT WAYNE HASKIN, THO V. HUYNH, TODD A. KALLMYER, BRIAN BRUCE LEE, JEFFREY O. YORK, and WILLIAM COPE

Appeal 2013-007847
Application 12/184,020
Technology Center 3700

Before JENNIFER D. BAHR, LINDA E. HORNER, and BRANDON J. WARNER, *Administrative Patent Judges*.

HORNER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Randal C. Schulhauser et al. ("Appellants") seek our review under 35 U.S.C. § 134 of the Examiner's decision rejecting claims 1–11. Claims 12–19 have been withdrawn from consideration. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM-IN-PART and designate our affirmance as NEW GROUNDS OF REJECTION pursuant to our authority under 37 C.F.R. § 41.50(b).

CLAIMED SUBJECT MATTER

Appellants' claimed subject matter relates to "medical devices for monitoring physiological conditions and, in some embodiments, to a minimally invasive implantable device for monitoring a physiological conditions [sic] and detecting the onset of a critical cardiac event such as a myocardial infarction." Spec. para. 1. Of those claims before us on appeal, claims 1 and 11 are independent. Claim 1, reproduced below, is illustrative of the subject matter on appeal.

> 1. A method for monitoring of cardiac conditions incorporating an implantable medical device in a subject, the method comprising the steps of:
>
> collecting physiological data associated with the subject from the implantable device at preset time intervals, wherein the collected data includes real-time electrocardiac signal data, heart sound data, activity level data and tissue perfusion data;
>
> comparing the electrocardiac signal data with a threshold electrocardiac criteria for indicating a strong likelihood of a cardiac event;
>
> triggering an alarm state if the electrocardiac signal data is not within the threshold electrocardiac criteria;
>
> determining the current activity level of the subject from the activity level data if the electrocardiac signal data is within the threshold electrocardiac criteria;
>
> determining whether the current activity level is below a threshold activity level;
>
> comparing the tissue perfusion data with a threshold tissue perfusion criteria for indicating a strong likelihood of a cardiac event if the current activity level is determined to be below a threshold activity level;

triggering an alarm state if the threshold tissue perfusion data is not within the threshold tissue perfusion criteria; and

triggering an alarm state if the threshold tissue perfusion data is within the threshold tissue perfusion criteria and the heart sound data indicates that S3 and S4 heart sounds are detected,

wherein if an alarm state is not triggered, the physiological data associated with the subject is collected at the expiration of the preset time interval.

Appeal Brief, filed February 12, 2013, ("Appeal Br."), 20, Claims App. Independent claim 11 is directed to a system for monitoring of cardiac conditions incorporating an implantable medical device in a subject comprising means for performing the steps of claim 1. *Id.* at 22–23.

EVIDENCE

The Examiner relied upon the following evidence:

Freeman	US 2005/0131465 A1	June 16, 2005
Sheldon	US 2006/0009811 A1	Jan. 12, 2006
Benaron	US 2007/0027371 A1	Feb. 1, 2007
Kramer	US 2007/0150014 A1	June 28, 2007

REJECTIONS

Appellants appeal from the Final Action, dated September 14, 2012, ("Final Act."), which includes the following rejections:

1. Claims 1–3, 5–9, and 11 under 35 U.S.C. § 103(a) as unpatentable over Kramer, Benaron, and Sheldon.
2. Claims 4 and 10 under 35 U.S.C. § 103(a) as unpatentable over Kramer, Benaron, Sheldon, and Freeman.

ANALYSIS

First Ground of Rejection: Unpatentable over Kramer, Benaron, and Sheldon

Appellants argue for patentability of claims 1–3 and 5–7 subject to the first ground of rejection as a group. Appeal Br. 9–13. We select claim 1 as representative of this group, and claims 2, 3, and 5–7 stand or fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv). Appellants present additional arguments for patentability of dependent claims 8, 9, and 11. *Id.* at 13–16. We address these arguments below under separate subheadings.

Claims 1–3 and 5–7

The Examiner found that Kramer discloses the method for monitoring cardiac conditions of claim 1, except that "Kramer . . . does not disclose monitoring tissue perfusion, and does not explicitly state triggering an alarm when signal data indicates a strong likelihood of [a] cardiac event." Final Act. 4–5. The Examiner also found that Benaron discloses using an implantable sensor for analyzing tissue perfusion, and that Sheldon discloses comparing sensor data to thresholds for providing an alarm notifying a patient of a cardiac event. *Id.* at 6. The Examiner determined that:

> It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system/method as taught by Kramer . . ., with an implantable sensor for analysis of tissue perfusion as taught by Benaron . . . and with comparison of sensor data to thresholds and based on the comparison providing an alarm notifying the patient of a cardiac event as taught by Sheldon . . ., since such a modification would provide the predictable results of more reliable and real-time sensing of ischemia and reducing trauma on the patient's heart and body by informing the patient of events so that they make [sic] take corrective/therapeutic steps.

Id.

Appellants argue that Kramer does not disclose the claimed step of "collecting of physiological data associated with the subject from the implantable device at preset time intervals." Appeal Br. 12; *see also* Reply Brief, filed May 29, 2013 ("Reply Br."), 7–8. We agree with the Examiner's finding that Kramer's implant controller inherently samples signals at preset intervals and does not sample signals continuously. Examiner's Answer, dated March 29, 2013 ("Ans."), 5. In particular, Kramer discloses that hemodynamic signals are sensed, and cardiac performance parameter data is produced, "according to a predetermined schedule, such as on a periodic basis." Kramer, paras. 59, 60, 63.

Appellants further contend that the combined teachings of Kramer and Benaron do not disclose "comparing the tissue perfusion data with a threshold tissue perfusion criteria for indicating a strong likelihood of a cardiac event if the current activity level is determined to be below a threshold activity level," as recited in claim 1. Appeal Br. 10–12; *see also* Reply Br. 5–7. Appellants also contend that the combination of references fails to disclose "the particular order and conditions imposed on the various comparing, determining and triggering steps by the limitations of independent claim 1." Appeal Br. 12; *see also* Reply Br. 8–10. For the reasons that follow, these arguments are not persuasive because they are not commensurate with the broadest reasonable interpretation of claim 1.

During examination, claims are given their broadest reasonable interpretation consistent with the specification. *See In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). "Construing claims

broadly during prosecution is not unfair to the applicant . . . because the applicant has the opportunity to amend the claims to obtain more precise claim coverage." *Id.*

Here, claim 1 is directed to a method for monitoring cardiac conditions incorporating an implantable medical device in a subject, where the method includes several steps that only need to be performed if certain conditions precedent are met. *See* Appeal Br. 20, Claims App. For example, claim 1 recites, in pertinent part:

> comparing the electrocardiac signal data with a threshold electrocardiac criteria for indicating a strong likelihood of a cardiac event;
>
> triggering an alarm state *if the electrocardiac signal data is not within the threshold electrocardiac criteria*;
>
> determining the current activity level of the subject from the activity level data *if the electrocardiac signal data is within the threshold electrocardiac criteria*.

Id. (emphasis added). Due to the language in the "triggering" and "determining" steps, logically, the "triggering" and "determining" steps do not need to be performed, after the "comparing" step if the condition precedent recited in each step is not met. More specifically, the "triggering" and "determining" steps of this claim are mutually exclusive. If the electrocardiac signal data is not within the threshold electrocardiac criteria, then an alarm is triggered and *the remaining method steps need not be*

performed. *See, e.g.*, Spec. para. 71[1]; *id.* paras. 75–78[2]; *id.*, Fig. 4[3]. If the electrocardiac signal data is within the threshold electrocardiac criteria, then the current activity level of the subject is determined. Given the language recited in the remaining steps of claim 1, the remaining steps only need to be reached *if* the determining step is reached. *See id.* Thus, in the event that the electrocardiac signal data is not within the threshold electrocardiac criteria and an alarm is triggered, the remaining steps of claim 1 need not be performed in the method as recited.

In claim construction, "the name of the game is the claim." *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998) (quoting Giles Sutherland

---

[1] Paragraph 71 of the Specification describes:

> In some embodiments, device processing system 28 is configured to obtain ECG data from sensors 16, 18 and 20 to determine whether the conditions for ST-Segment Elevation Myocardial Infarction or STEMI exist. If the conditions do not exist[,] accelerometer 29 may be used to ascertain the level of activity of the subject before interpreting the remaining sensor data and triggering an alarm, response or both.

[2] Paragraph 75 describes that serious conditions are immediately identified at the start of the method by determining whether collected data exceeds threshold values, and if so, an appropriate response is triggered. Paragraph 78 describes that "[s]erious conditions may also be identified through merging and evaluating all data obtained from sources 40, even if ST-segment data . . . do not immediately indicate cause for concern."

[3] Figure 4 is a flow diagram of method 100, which shows that the method follows at least two paths – a first path in which if STEMI is indicated from ECG data (step 104), then an alarm is generated (step 106) and the method ends, and a second path in which if STEMI is not indicated from ECG data (step 104), then the method proceeds with the remaining steps (108 110, 112) as appropriate.

Rich, *Extent of Protection and Interpretation of Claims – American Perspectives*, 21 Int'l Rev. Indus. Prop. & Copyright L. 497, 499 (1990)). Based on the claim limitations as written, the broadest reasonable interpretation of claim 1 encompasses an instance in which the method ends when the alarm is triggered in response to the cardiac signal data not being within the threshold electrocardiac criteria, such that the step of "determining the current activity level of the subject" and the remaining steps need not be reached. In other words, claim 1 as written covers at least two methods, one in which the prerequisite condition for the triggering step is met and one in which the prerequisite condition for the determining step is met. Thus, the broadest reasonable interpretation encompasses a method where only the steps of "collecting physiological data associated with the subject from the implantable device at preset time intervals, wherein the collected data includes real-time electrocardiac signal data, heart sound data, activity level data and tissue perfusion data," "comparing the electrocardiac signal data with a threshold electrocardiac criteria for indicating a strong likelihood of a cardiac event," and "triggering an alarm state if the electrocardiac signal data is not within the threshold electrocardiac criteria" are performed.[4] The Examiner determined that the prior art would have rendered obvious this method covered by claim 1, and for the reasons that

[4] The Board previously has construed similar method steps in this same manner. *See, e.g.*, *Ex Parte Fleming*, Appeal 2014-002849, 2014 WL 7146104 (PTAB Dec. 12, 2014) (expanded panel decision on rehearing), *Ex parte Urbanet*, Appeal 2011-002606, 2012 WL 4460637 (PTAB Sept. 19, 2012), and *Ex Parte Katz*, Appeal 2010-006083, 2011 WL 514314 (BPAI Jan. 27, 2011).

follow, we do not find persuasive Appellants' arguments contesting this rejection.

The Examiner in this case was able to present a prima facie case of obviousness as to claim 1 by providing evidence to show obviousness of the "collecting," "comparing," and "triggering" steps. The Examiner did not need to present evidence of the obviousness of the remaining method steps of claim 1 that are not required to be performed under a broadest reasonable interpretation of the claim (e.g., instances in which the electrocardiac signal data is not within the threshold electrocardiac criteria such that the condition precedent for the determining step and the remaining steps of claim 1 has not been met). The Examiner determined that Kramer, as modified by Benaron and Sheldon, renders obvious the method of claim 1, including the "collecting," "comparing," and "triggering" steps. Final Act. 4–6. Appellants' arguments that are directed to the failure of the Examiner to demonstrate adequately that the "determining" step and the remaining steps of claim 1 are rendered obvious are not commensurate with the broadest reasonable interpretation of claim 1 and are, therefore, unpersuasive.

A proper interpretation of claim language, under the broadest reasonable interpretation of a claim during prosecution, must construe the claim language in a way that at least encompasses the broadest interpretation of the claim language for purposes of infringement. "[I]t is axiomatic that that which would literally infringe if later anticipates if earlier." *Bristol-Myers Squibb Co. v. Ben Venue Labs, Inc.*, 246 F.3d 1368, 1378 (Fed. Cir. 2001). Based on the manner in which claim 1 is written, the modified method of Kramer would literally infringe claim 1 by virtue of its

performance of only the "collecting," "comparing," and "triggering" steps. *See, e.g., Applera Corp. v. Illumina, Inc.*, 375 Fed. Appx. 12, 21 (Fed. Cir. 2010) (unpublished) (affirming a district court's interpretation of a method claim as including a step that need not be practiced if the condition for practicing the step is not met); *Cybersettle, Inc. v. Nat'l Arbitration Forum, Inc.*, 243 Fed. Appx. 603, 607 (Fed. Cir. 2007) (unpublished) ("It is of course true that method steps may be contingent. If the condition for performing a contingent step is not satisfied, the performance recited by the step need not be carried out in order for the claimed method to be performed."). For the reasons provided *supra*, we agree with the Examiner's determination that Kramer, as modified by Benaron and Sheldon, renders obvious the "collecting," "comparing," and "triggering" steps of claim 1. As such, we agree with the Examiner's determination that claim 1 is unpatentable under 35 U.S.C. § 103(a).

For these reasons, we sustain the Examiner's rejection of claim 1 as unpatentable over Kramer, Benaron, and Sheldon. Claims 2–3 and 5–7 fall with claim 1.

Claim 8

Claim 8 depends from claim 1 and recites the steps of:

> collecting respiration data relating to the subject's respiration;
>
> comparing the respiration data with a threshold respiration criteria for indicating a strong likelihood of a cardiac event if the current activity level is below a threshold activity level; and
>
> triggering an alarm state if either the threshold tissue perfusion data is not within the threshold tissue perfusion criteria

> or the respiration data is not within the threshold respiration criteria.

Appeal Br. 22, Claims App. Appellants argue that Kramer does not disclose the step of "comparing the respiration data with a threshold respiration criteria for indicating a strong likelihood of a cardiac event if the current activity level is below a threshold activity level." Appeal Br. 13–14; *see also* Reply Br. 10–12.

At the outset, we note Appellants' concession that Kramer discloses collecting respiration data. Appeal Br. 14 (stating that "Kramer discloses that respiration data is collected"). Appellants argue only that Kramer does not teach that the respiration data is "compared to a threshold criteria, or used in a separate way, to indicate a strong likelihood of a cardiac event, as required by claim 8." *Id.* We do not find this argument persuasive because the claimed step of "comparing the respiration data with a threshold respiration criteria for indicating a strong likelihood of a cardiac event" is a limitation that only needs to occur "if the current activity level is below a threshold activity level." As discussed *supra*, the broadest reasonable interpretation of claim 1 includes an instance in which the step of "determining the current activity level of the subject" and the remaining steps based thereon do not take place. Thus, under the broadest reasonable interpretation, the step of "comparing the respiration data with a threshold respiration criteria for indicating a strong likelihood of a cardiac event if the current activity level is below a threshold activity level" recited in claim 8 is not necessarily performed. As such, Appellants' argument is not

commensurate with the broadest reasonable interpretation of claim 8 and is, therefore, unpersuasive.

For these reasons, we sustain the Examiner's rejection of claim 8 as unpatentable over Kramer, Benaron, and Sheldon.

Claim 9

Claim 9 depends from claim 1 and recites the steps of:

> collecting systolic pressure data; and
>
> triggering an alarm state if the activity level is below a threshold activity level, the threshold tissue perfusion data is within the threshold tissue perfusion criteria, the heart sound data does not indicate that S3 and S4 heart sounds are detected and the systolic pressure data indicates a systolic pressure change greater than a threshold criteria for systolic pressure.

Appeal Br. 22, Claims App. Appellants rely on the arguments presented for patentability of claim 1 and additionally argue that the Examiner's rejection of claim 9 is improper because Kramer does not disclose performing the steps in the claimed order. Appeal Br. 14–15; *see also* Reply 12–13. Appellants' arguments are not persuasive for the same reasons discussed *supra* in regard to claim 1. Further, under the broadest reasonable interpretation of claim 9, the step of "triggering an alarm state" is a limitation that only needs to occur "if the activity level is below a threshold activity level." As discussed *supra*, the broadest reasonable interpretation of claim 1 includes an instance in which the step of "determining the current activity level of the subject" and the remaining steps based thereon do not take place. Appellants' arguments directed to the claimed order of these steps are not commensurate with the broadest reasonable interpretation of

claim 9 and are, therefore, unpersuasive. As such, we sustain the rejection of claim 9 as unpatentable over Kramer, Benaron, and Sheldon.

Claim 11

Independent claim 11 is directed to a different statutory class of invention than process claim 1. Claim 11 is directed to a system for monitoring cardiac conditions and recites various "means for" limitations involving functions substantially similar to those recited in claim 1. *See* Appeal Br. 22–23, Claims App. Use of the term "means" raises a presumption that Appellants used the term to invoke 35 U.S.C. § 112, sixth paragraph. *Altiris Inc. v. Symantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). "This presumption can be rebutted when the claim, in addition to the functional language, recites structure sufficient to perform the claimed function in its entirety." *Id.* The "means for" limitations in claim 11 are followed by functional language without reciting structure "sufficient to perform the claimed function in its entirety." Thus, these limitations invoke 35 U.S.C. § 112, sixth paragraph.

Based on this understanding of the claim language, we look to the Specification to determine the structure corresponding to each of the claimed "means for" limitations. Appellants' Specification discloses "[p]rocessor 28 executes instructions stored in digital memory 30 to provide functionality as described herein." Spec. para. 53. Furthermore, an algorithm for carrying out the claimed functions is depicted in Figure 4 and described in paragraphs 72 through 87 of the Specification. *See WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999) ("In a means-plus-function claim in which the disclosed structure is a computer, or microprocessor,

programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm."). The Specification describes that the various steps of process 100, shown in Figure 4, "may be implemented with computer-executable instructions that are stored in a digital memory 30 and that are appropriately executed by processor 28." Spec. para. 72. The ensuing paragraphs describe, in sufficient detail, the algorithm as carried out by processor 28. *Id.* paras. 73–87. As such, we interpret the claimed "means for" collecting, comparing, triggering, and determining to call for a processor programmed to perform the algorithm set forth in Figure 4 and equivalents thereof.

Although claim 11 recites functions that are substantially similar to the steps recited in the method of claim 1, as noted *supra*, claim 11 is directed to a system. The broadest reasonable interpretation of a system claim having structure that performs a function, which only needs to occur if a condition precedent is met, still requires structure for performing the function should the condition occur. This interpretation of the system claim differs from the method claim because the structure (i.e., a processor programmed to perform an algorithm for carrying out the recited function should the recited condition be met) *is present in the system regardless* of whether the condition is met and the function is actually performed. Unlike claim 1, which is written in a manner that does not require all of the steps to be performed should the condition precedent not be met, claim 11 is limited to the structure capable of performing all the recited functions. In other words, in this case, the system of claim 11 is narrower in scope than the

method of claim 1. Thus, in order to show anticipation or obviousness of a claim reciting structure that performs a function tied to a condition precedent, the Examiner must cite prior art that discloses or renders obvious such structure.

In contesting the rejection of claim 11, Appellants repeat the arguments made for patentability of claim 1, including the contention that the combination of Kramer, Benaron, and Sheldon fails to disclose the particular order and conditions required by the claim. Appeal Br. 16–18; *see also* Reply Br. 13. Specifically, Appellants argue that the Examiner erred in determining that the order in which the functions are performed was "an arbitrary design consideration which fails to patentably distinguish it over the prior art." Appeal Br. 18 (quoting Final Act. 3). Appellants contend that "the specific[] limitations on the means elements in claim 11 assist in reducing false positives, gauging the severity of an incident of ischemia, reducing the amount of power and memory needed by the system, and allow[ing] for modification of the thresholds based on the current activity level of the patient." *Id.*; *see also id.* at 13 (citing Spec. paras. 60, 63, 92). Appellants also assert that the order is not arbitrary because "determining the current activity level . . ." and "comparing the tissue perfusion data . . ." occur only if certain conditions are met. Reply Br. 10.

The Examiner responds that Appellants' arguments do not refute the Examiner's finding that the order is "an arbitrary design choice which fails to patentably distinguish [the claim] over the prior art." Ans. 11–12. The Examiner also asserts that because the prior art samples the same sensors, there would have been only a finite number of configurations to assess

cardiac function and rearranging the order of the prior art involves only routine skill. *Id.* at 12–13 (citing *In re Japikse*, 181 F.2d 1019 (CCPA 1950)). The Examiner's determination of obviousness is lacking for two reasons.

First, the Examiner has failed to define adequately the "finite number of configurations to assess cardiac function." *See Procter & Gamble Co. v. Teva Pharm. USA, Inc.*, 566 F.3d 989, 996 (Fed. Cir. 2009) (affirming district court determination that evidence failed to establish that structural modification of prior art was "routine" and noting that patents are not barred because it would have been obvious to explore or experiment where the prior art gives only general guidance and no direction as to which parameters are critical). Here, the number of different types of data and the possible combinations of orders of assessing the data are wide ranging. In this case, the number of possible configurations is more than a finite number of identified, predictable solutions from among which a person of ordinary skill would pursue as a matter of ordinary skill and common sense. *See KSR Int'l. Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007).

Second, the Examiner's reliance on *Japikse* is misplaced. In *Japikse*, the claim at issue related to a hydraulic power press. 181 F.2d at 1023. There, the prior art disclosed all the structural limitations of the claimed press except for the claimed position of a starting switch. *Id.* The court affirmed the Board's determination that the claimed position of the starting switch did not patentably distinguish over the prior art press because shifting the starting switch disclosed by the prior art to a different position would not modify the operation of the device. *Id.* In this case, the difference between

the claimed system and the prior art systems is more than the mere reordering of the functions performed by the system. The combined teachings of the prior art do not provide adequate guidance as to a particular order[5] of performing the claimed comparisons and determinations as it relates to the claimed data. As such, the cited prior art does not appreciate that the order of the functions in the algorithm for assessing the claimed data matters. Further, Appellants have pointed to critical differences between the claimed system and the prior art system based on the order of the functions performed by the claimed system. For these reasons, we do not sustain the Examiner's rejection of claim 11 as unpatentable over Kramer, Benaron, and Sheldon.

---

[5] An order of certain functions performed by the structure (i.e., a processor programmed to perform the algorithm) recited in claim 11 is logically implied due to the language in the claim. For example, the function performed by the "means for determining the current activity level" needs to occur only if the preceding function of the "means for comparing electrocardiac signal data with a threshold" occurs and shows that "the electrocardiac signal data is within the threshold." *See* Appeal Br. 23, Claims App. Thus, because performing the "determining" function is conditioned upon the result of the "means for comparing," the function performed by the "means for comparing" logically must precede the "determining" function being performed. Similarly, the algorithm must be programmed to invoke the "means for determining the current activity level" prior to invoking the "means for comparing the tissue perfusion data with a threshold" because this "comparing" function needs to occur only "if the current activity level is determined to be below a threshold." *See id.*

Second Ground of Rejection: Unpatentable over Kramer, Benaron, Sheldon, and Freeman

To refute the rejection of dependent claims 4 and 10, Appellants rely on the arguments presented for patentability of claim 1 and additionally argue that Freeman does not cure the deficiencies of Kramer, Benaron, and Sheldon. Appeal Br. 18–19. For the same reasons provided *supra* in our analysis of the rejection of claim 1, we do not find these arguments persuasive of error. Accordingly, we sustain the rejection of claims 4 and 10 as unpatentable over Kramer, Benaron, Sheldon, and Freeman.

DECISION

The decision of the Examiner to reject claims 1–3 and 5–9 under 35 U.S.C. § 103(a) as unpatentable over Kramer, Benaron, and Sheldon is AFFIRMED.

The decision of the Examiner to reject claim 11 under 35 U.S.C. § 103(a) as unpatentable over Kramer, Benaron, and Sheldon is REVERSED.

The decision of the Examiner to reject claims 4 and 10 under 35 U.S.C. § 103(a) as unpatentable over Kramer, Benaron, Sheldon, and Freeman is AFFIRMED.

Because in some instances the claim interpretation relied on by the Board to sustain the rejections of claims 1–10 differs from the interpretation relied on by the Examiner, we designate our affirmance of the rejections of these claims as NEW GROUNDS OF REJECTION so as to provide Appellants with a full and fair opportunity to respond to the thrust of the rejections. This decision should not be construed to imply that, in all

instances in which the Board affirms a rejection based on a claim interpretation that differs from the claim interpretation applied by the examiner, the thrust of the rejection has changed so as to warrant designation of the affirmance as a new ground of rejection. Rather, in this particular case, in light of the scope of the arguments presented by Appellants, the Board deemed it, in the interests of fairness to Appellants, appropriate to designate the affirmance as a new ground of rejection.

This decision contains new grounds of rejection pursuant to 37 C.F.R. § 41.50(b). 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 Appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new grounds 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-IN-PART; 37 C.F.R. § 41.50(b)