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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte AKRAM BOU-GHANNAM, KALMAN GYIMESI, and
JENNY S. LI

Appeal 2020-000142
Application 15/138,535
Technology Center 3600

Before ROBERT E. NAPPI, LARRY J. HUME, AND JASON J. CHUNG,
Administrative Patent Judges.

HUME, *Administrative Patent Judge.*

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision rejecting claims 1–6, which are all rejections pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM the rejection of claims 1–6.

¹ We use the term “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as the assignee, International Business Machines Corporation. Appeal Br. 1.

STATEMENT OF THE CASE²

The claims are directed to a system and method for dynamic discovery and enhancements of diagnostic rules. *See* Spec. (Title). In particular, Appellant’s disclosed embodiments and claimed invention “relate[] to information handling systems. More specifically, embodiments of the invention relate to dynamic discover and enhancements of diagnostic rules. Spec. ¶ 1.

Related Appeal

This application is a continuation under 35 U.S.C. § 120 of related U.S. Application Serial No. 14/799,082, Appeal No. 2020-000128, in which we affirmed the Examiner’s rejections in a Decision mailed May 15, 2020.

Exemplary Claims

Claims 1 and 3, reproduced below, are representative of the subject matter on Appeal (*italicized emphases* and bracketed labeling added to contested prior-art limitations; underlined emphasis added to contested limitations under 35 U.S.C. § 112):

1. A computer-implementable method for performing a complex asset analysis operation within a complex asset analysis environment, the complex asset analysis environment comprising a plurality of crowd sourced complex assets and a complex asset analysis system, the plurality of crowd sourced

² Our decision relies upon Appellant’s Appeal Brief (“Br.,” filed June 17, 2019); Examiner’s Answer (“Ans.,” mailed July 18, 2019); Final Office Action (“Final Act.,” mailed Feb. 15, 2019); and the original Specification (“Spec.,” filed Apr. 26, 2016) (claiming benefit as a continuation application of US 14/799,082, filed July 14, 2015). Appellant did not file a Reply Brief in response to the factual findings and legal conclusions in the Examiner’s Answer.

complex assets and the complex asset analysis system communicating via a network, comprising:

[a] receiving crowdsourced data from the plurality of crowd sourced complex assets via the network, each of the plurality of crowd sourced complex assets comprising a respective motor vehicle, each of the plurality of crowd sourced complex assets comprising a respective data collection agent, the respective data collection agent providing respective data to a complex asset analysis system,

the crowdsourced data being received via a crowdsourcing operation, the crowdsourcing operation comprising obtaining the crowdsourced data by soliciting contributions from a group of complex assets,

[b] the crowdsourced data corresponding to a common information model, the crowdsourced data specifying a configuration of a complex asset of the plurality of crowd sourced complex assets, a snap shot of asset performance parameters during problems of the complex asset and associated maintenance and repair experience of the complex asset;

aggregating the crowdsourced data received from the plurality of crowd sourced complex assets via the complex asset analysis system;

performing the complex asset analysis operation based upon the crowdsourced data received from the plurality of crowd sourced complex assets, the complex asset analysis operation providing an information brokerage function for a community of complex assets by managing shared information from the plurality of crowd sourced complex assets; and,

controlling at least one complex asset to control operator actions based upon individual complex asset data and crowdsourced data relating to a particular type of complex asset.

3. The method of claim 1, wherein:

each of the plurality of complex assets register respective complex asset data and subscribe for content notifications based on a type and configuration of the complex asset.

REFERENCES

The prior art relied upon by the Examiner as evidence is:

Name	Reference	Date
McClellan et al. ("McClellan")	US 2008/0294690 A1	Nov. 27, 2008
Koch	US 2014/0277902 A1	Sept. 18, 2014

REJECTIONS³

R1. Claims 1–6 stand rejected under 35 U.S.C. § 112(a)⁴ as failing to comply with the written description requirement. Final Act. 3.

R2. Claims 1–6 stand rejected under 35 U.S.C. § 112(b) as being indefinite. Final Act. 6; *see n.4.*

R3. Claims 1, 2, and 4–6 stand rejected under 35 U.S.C. §§ 102(a)(1) and 102(a)(2) as being anticipated by Koch. Final Act. 8.

³ In the Final Action, the Examiner withdrew an objection to the Drawings and the rejection of claims 1–6 under 35 U.S.C. § 101, and added an objection to the Specification. Final Act. 2, 3. To the extent the objection to the Specification bears on the rejections under 35 U.S.C. § 112, the objection is before us on Appeal.

⁴ Although the Examiner alternatively rejects the claims under pre-AIA 35 U.S.C. § 112, first paragraph (Final Act. 3) and pre-AIA 35 U.S.C. § 112, second paragraph (Final Act. 6), we note the effective filing date of the present application, July 14, 2015, dictates that provisions of the AIA are in effect.

R4. Claim 3 stands rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Koch and McClellan. Final Act. 14.

CLAIM GROUPING

Based on Appellant's arguments (Br. 2–7) and our discretion under 37 C.F.R. § 41.37(c)(1)(iv), we decide the appeal of written description Rejection R1 of claims 1–6 on the basis of representative claim 1; we decide the appeal of indefiniteness Rejection R2 of claims 1–6 on the basis of claim 1; and we decide the appeal of anticipation Rejection R3 of claims 1, 2, and 4–6 on the basis of representative claim 1. We address obviousness Rejection R4 of claim 3, *infra*.

ISSUES AND ANALYSIS

In reaching this decision, we consider all evidence presented and all arguments actually made by Appellant. To the extent Appellant has not advanced separate, substantive arguments for particular claims, or other issues, such arguments are waived. 37 C.F.R. § 41.37(c)(1)(iv).

We agree with particular arguments advanced by Appellant with respect to written description Rejection R1 and indefiniteness Rejection R2 of claims 1–6, and we do not sustain the rejections, as discussed below.

However, we disagree with Appellant's arguments with respect to anticipation Rejection R3 of claims 1, 2, and 4–6 and obviousness Rejection R4 of claim 3 and, unless otherwise noted, we incorporate by reference herein and adopt as our own: (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken, and (2) the reasons and rebuttals set forth in the Examiner's Answer in response to Appellant's

arguments. We highlight and address specific findings and arguments regarding claims 7 and 9 for emphasis as follows.

1. § 112(a) Written Description Rejection R1 of Claims 1–6

Issue 1

Appellant argues (Br. 2–4) the Examiner’s rejection of claim 1 under 35 U.S.C. § 112(a) as lacking written description support is in error. These contentions present us with the following issue:

Did the Examiner err in finding the originally filed disclosure fails to provide adequate written description support for the limitation of “controlling at least one complex asset to control operator actions based upon individual complex asset data and crowdsourced complex asset data relating to a particular type of complex asset” because, allegedly, the Specification does not describe *how* that particular step is performed?

Principles of Law

The test for compliance with the written description requirement is “whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (*en banc*). “[T]he level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology.” *Id.*

In contrast, “[t]he test of *enablement* is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.

U.S. v. Telectronics, Inc., 857 F.2d 778, 785 (Fed. Cir. 1988) (emphasis added).

Analysis

In rejecting claim 1 as lacking written description support for the contested limitation identified above, the Examiner states the Specification in paragraph 57 “does not describe how that is performed.” Final Act. 3. Further, “there are no specifics on how the step of controlling at least one complex asset to control operator action based upon at least one of individual complex asset data and crowdsourced complex asset data relating to a particular type of complex asset is actually performed. The Specification does not explain *how* the data is actually used to control the complex asset and the operator action.” Final Act. 4.

In response, Appellant contends:

A review of the application as filed reveals that Applicant describes controlling at least one complex asset to control operator actions based upon individual complex asset data and crowdsourced complex asset data relating to a particular type of complex asset. (See application, *e.g.*, paragraphs [0057], [0058] – [0066]; Figure 3 and 4).

Br. 3. Appellant further quotes paragraph 57 of the Specification in support of their argument and, in particular, highlights a portion of that paragraph that discloses, in pertinent part, “certain embodiments . . . can predict and diagnose machine failures *as well as encourage adjustment of operator actions that optimize asset usage. . . .*[and] *the complex asset analysis system 301 can provide certain controls over the complex asset to adjust the operator actions.* *Id.* (quoting Spec. ¶ 57).

After review of the cited paragraphs of the Specification, we are persuaded by Appellant’s argument that the originally-filed disclosure provides adequate *written description support* for the contested limitation. Moreover, we disagree with the Examiner’s finding as it relates to written description support, because it appears that the Examiner has conflated the requirements for written description support with that for enablement. *See* Final Act. 3–4.

Accordingly, we do not sustain the Examiner’s written description Rejection R1 under 35 U.S.C. § 112(a) of claim 1, and claims 2–6 which fall therewith. *See* Claim Grouping, *supra*.

2. § 112(b) indefiniteness Rejection R2 of Claims 1–6

Issue 2

Appellant argues (Br. 5) the Examiner’s rejection of claim 1 under 35 U.S.C. § 112(b) as being indefinite is in error. These contentions present us with the following issue:

Did the Examiner err in finding claim 1 is indefinite because the recitation of “controlling at least one complex asset to control operator actions based upon individual complex asset data and crowdsourced complex asset data relating to a particular type of complex asset” contains unclear antecedent basis for the recitation of “individual complex asset data” and “crowdsourced data relating to a particular type of complex asset?”

Principles of Law

We apply the indefiniteness test approved by *In re Packard*, 751 F.3d 1307 (Fed. Cir. 2014) (per curiam): “A claim is indefinite when it contains words or phrases whose meaning is unclear,” and “claims are required to be

cast in clear—as opposed to ambiguous, vague, indefinite—terms.” *See Packard*, 751 F.3d at 1310, 1313; *Ex parte McAward*, Appeal No. 2015-006416 (PTAB Aug. 25, 2017) (precedential) at *8–11 (explaining because of different approaches to indefiniteness before the PTAB and the courts, the PTAB continues to follow *Packard* after the Supreme Court’s *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898 (2014) decision).

[W]hen 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, and thereafter the applicant fails to provide a satisfactory response, the USPTO can properly reject the claim as failing to meet the statutory requirements of § 112(b).

Packard, 751 F.3d at 1311.

Further, we give pending claims “their broadest reasonable interpretation consistent with the specification” and “in light of the specification as it would be interpreted by one of ordinary skill in the art.” *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

Analysis

With respect to indefiniteness of the contested limitations, the Examiner concludes:

It is unclear whether if “individual complex asset data” and “crowdsourced data relating to a particular type of complex asset” are the same as the “receiv[ed] crowdsourced data from the plurality of crowd sourced complex assets” of the first limitation or new/different set of data (“individual complex asset data” and “crowdsourced data relating to a particular type of complex asset”). If these are new and different set of data (“individual complex asset data” and “crowdsourced data

relating to a particular type of complex asset”), it is unclear how this step is performed in relation with the previous steps.

Final Act. 6–7.

Appellant responds by contending:

These terms refer to different data. This difference can specifically be seen in the element “controlling at least one complex asset to control operator actions based upon individual complex asset data and crowdsourced data relating to a particular type of complex asset” (emphasis added). Specifically, the term “individual complex asset data” is discussed at Paragraph [0057] of the application as filed and the term “crowdsourced data” is discussed at Paragraph [0052] of the application as filed.

Br. 5 (emphasis omitted).

We agree with Appellant that the recited terms refer to different data, and further note the contested terms represent the first instance or recitation of these specific limitations in claim 1. We further determine that the Examiner has not shown the meaning of the claims are unclear to one skilled in the art. *See Packard*, 751 F.3d at 1310.

Accordingly, we do not sustain the Examiner’s Rejection R2 of claims 1–6 for indefiniteness.

3. §§ 102(a)(1) and 102(a)(2) anticipation Rejection R3 of Claims 1–6

Issue 3

Appellant argues (Br. 8) the Examiner’s rejection of claim 1 under 35 U.S.C. §§ 102(a)(1) and 102(a)(2) as being anticipated by Koch is in error. These contentions present us with the following issues:

Did the Examiner err in finding Koch discloses “[a] computer-implementable method for performing a complex asset analysis operation within a complex asset analysis environment, the complex asset analysis environment comprising a plurality of crowd sourced complex assets and a complex asset analysis system, the plurality of crowd sourced complex assets and the complex asset analysis system communicating via a network,” that includes *inter alia*, the limitations of:

[a] receiving crowdsourced data from the plurality of crowd sourced complex assets via the network, each of the plurality of crowd sourced complex assets comprising a respective motor vehicle, each of the plurality of crowd sourced complex assets comprising a respective data collection agent, the respective data collection agent providing respective data to a complex asset analysis system;

wherein

[b] the crowdsourced data corresponding to a common information model, the crowdsourced data specifying a configuration of a complex asset of the plurality of crowd sourced complex assets, a snap shot of asset performance parameters during problems of the complex asset and associated maintenance and repair experience of the complex asset,

as recited in claim 1?

Principles of Law

Anticipation of a claim under 35 U.S.C. § 102 occurs when each claimed element and the claimed arrangement or combination of those elements is disclosed, inherently or expressly, by a single prior art reference. *Therasense, Inc. v. Becton, Dickinson & Co.*, 593 F.3d 1325, 1332 (Fed. Cir. 2010). A reference inherently discloses an element of a claim “if that missing characteristic is *necessarily* present, or inherent, in the single

anticipating reference.” *Schering Corp. v. Geneva Pharms.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003) (citation omitted) (emphasis added). “Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Therasense*, 593 F.3d at 1332 (citing *Cont’l Can Co. USA, Inc. v. Monsanto Co.*, 948 F.2d 1264, 1269 (Fed. Cir. 1991)).

Analysis

The Examiner provides a detailed mapping of the contested limitations [a] and [b] above to the Koch reference. *See* Final Act. 8–10 (citing Koch at multiple paragraphs, including claims 1 and 6 of Koch, and Fig. 1).

Limitation [a]: “receiving”

With respect to limitation [a], Appellant contends:

[T]he examiner cites to a portion of Koch which discloses three crowdsourcing modules (a community diagnostics module 132, a community road health module 134 and a community driver health module 136) (see e.g., Koch, Figure 1 and Paragraph [0021]) as well as a portion of Koch which discloses that in-vehicle devices can report information to a vehicle management system 110 (see e.g., Paragraph [0022]). However, it is respectfully submitted that the claimed respective data collection agents which provide respective data to the complex asset analysis system are patentably distinct from the in-vehicle devices disclosed by Koch.

Br. 5.

Appellant further argues, “nowhere within Koch is there any disclosure or suggestion of receiving crowdsourced data from the plurality of crowd sourced complex assets via the network, each of the plurality of

crowd sourced complex assets comprising a respective motor vehicle, each of the plurality of crowd sourced complex assets comprising a respective data collection agent, the respective data collection agent providing respective data to the complex asset analysis system, as required by claim 1.” Br. 6.

We are not persuaded by Appellant’s allegations because mere attorney arguments and conclusory statements that are unsupported by factual evidence are entitled to little probative value. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997); *see also In re De Blauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984); and *Ex parte Belinne*, No. 2009-004693, slip op. at 7–8 (BPAI Aug. 10, 2009) (informative), *available at* <https://www.uspto.gov/sites/default/files/ip/boards/bpai/decisions/inform/fd09004693.pdf>. *See In re Lovin*, 652 F.3d 1349, 1357 (Fed. Cir. 2011) (“[W]e hold that the Board 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.”); *cf. In re Baxter Travenol Labs.*, 952 F.2d 388, 391 (Fed. Cir. 1991) (“It is not the function of this court to examine the claims in greater detail than argued by an appellant, looking for [patentable] distinctions over the prior art.”). Arguments not made are therefore waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Limitation [b]: Crowdsourced Data Correspond[s] to a Common Information Model

Similarly, with respect to limitation [b], Appellant contends:

[T]he examiner cites to portions of Koch which disclose collecting summarizing characteristics of fleet applications as a

list where variables are annotated in time (see *e.g.*, Koch, Paragraph [0085]). However, it is respectfully submitted that crowdsourced data which corresponds to a common information model and which specifies a configuration of a complex asset of the plurality of crowd sourced complex assets, a snap shot of asset performance parameters during problems of the complex asset and associated maintenance and repair experience of the complex asset is are patentably distinct from the list of summarizing characteristics disclosed by Koch.

Accordingly, nowhere within Koch, taken alone or in combination, is there any disclosure or suggestion of the crowdsourced data corresponding to a common information model, the crowdsourced data specifying a configuration of a complex asset of the plurality of crowd sourced complex assets, a snap shot of asset performance parameters during problems of the complex asset and associated maintenance and repair experience of the complex asset, all as required by claim 1. These deficiencies of Koch are not cured by McClellan.

Br. 6 (emphasis added).

Again, we disagree with Appellant's contentions, which amount to a general allegation that the cited prior art does not disclose the disputed limitation [b], as indicated above, for example, by the italicized portion of Appellant's argument on page 6 of the Brief. The Examiner makes further findings in the Answer (6–9) which Appellant does not rebut by filing a Reply Brief.

Therefore, based upon the un rebutted findings above, on this record, we are not persuaded of error in the Examiner's reliance on the cited prior art to disclose the disputed limitation of claim 1, nor do we find error in the Examiner's resulting finding of anticipation.

Accordingly, we sustain the Examiner's anticipation rejection of independent claim 1, and grouped claims 2–6 that fall therewith. *See* Claim Grouping, *supra*.

4. § 103 Rejection R4 of Claim 3

Issue 4

Appellant argues (Br. 7) the Examiner's rejection of claim 3 under 35 U.S.C. § 103 as being obvious over the combination of Koch and McClellan is in error. These contentions present us with the following issue:

Did the Examiner err in finding the cited prior art combination teaches or suggests the method of claim 1, wherein “each of the plurality of complex assets register respective complex asset data and subscribe for content notifications based on a type and configuration of the complex asset,” as recited in claim 3?

Analysis

The Examiner cites McClellan at paragraphs 92 through 99 as teaching or suggesting plural recited vehicle (complex asset) registrations. Final Act. 14; Ans. 10.

Appellant argues “nowhere within the cited portions of McClellan (nor anywhere else in McClellan) is there any disclosure or suggestion of each of the plurality of complex assets register respective complex asset data, much less subscribing for content notifications based on a type and configuration of the complex asset, as required by claim 3.” Br. 7 (emphasis omitted).

In the Answer (9), the Examiner identifies the conclusory nature of Appellant’s argument, and further explains the rejection with respect to the disclosure of McClellan, and cites “para[graphs] [0017], [0046], [0048], [0066], [0072] [for] disclos[ing] transmitting of subscribed notification based on driver performance which comprising vehicle type and monitored configuration (i.e. speed, acceleration, impact, accident).” Ans. 10. Again, Appellant does not rebut the Examiner’s additional findings by filing a Reply Brief.

Therefore, based upon the unrebutted findings above, on this record, we are not persuaded of error in the Examiner’s reliance on the cited prior art combination to teach or suggest the disputed limitations of claim 3, nor do we find error in the Examiner’s resulting conclusion of obviousness.

Accordingly, we sustain the Examiner’s obviousness Rejection R4 of dependent claim 3.

CONCLUSIONS

(1) The Examiner erred with respect to written description Rejection R1 of claims 1–6 under 35 U.S.C. § 112(a), and we do not sustain the rejection.

(2) The Examiner erred with respect to indefiniteness Rejection R2 of claims 1–6 under 35 U.S.C. § 112(b), and we do not sustain the rejection.

(3) The Examiner did not err with respect to anticipation Rejection R3 of claims 1, 2, and 4–6 under 35 U.S.C. § 102(a)(1) or § 102(a)(2), and we sustain the rejection.

(4) The Examiner did not err with respect to obviousness Rejection R4 of claim 3 under 35 U.S.C. § 103 over the cited prior art combination of record, and we sustain the rejection.

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, we affirm the Examiner's decision. *See* 37 C.F.R. § 41.50(a)(1).

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Basis / References	Affirmed	Reversed
1-6	112(a)	Written Description		1-6
1-6	112(b)	Indefiniteness		1-6
1, 2, 4-6	102(a)(1) / 102(a)(2)	Anticipation Koch	1, 2, 4-6	
3	103	Obviousness Koch, McClellan	3	
Overall Outcome			1-6	

FINALITY AND 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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED