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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/777,416	02/26/2013	Sigram SCHINDLER	070285.000013	6134

20230 7590 01/03/2017
Vorys, Sater, Seymour and Pease LLP
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EXAMINER
SMITH, PAULINHO E

ART UNIT	PAPER NUMBER
2129	

NOTIFICATION DATE	DELIVERY MODE
01/03/2017	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SIGRAM SCHINDLER

Appeal 2016-003159
Application 13/777,416
Technology Center 2100

Before ROBERT E. NAPPI, CATHERINE SHIANG, and ALEX S. YAP, *Administrative Patent Judges*.

YAP, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–30, which are all the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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[1] According to Appellant, the real party in interest is Sigram Schindler Beteiligungsgesellschaft mbH. (App. Br. 1.)

STATEMENT OF THE CASE

Introduction

Appellant's invention relates to an Innovative Expert System that "for a given innovation/invention the claimed Data Structure DS – structurally being the same for any innovation/invention – meet two kinds of functional requirements." (Feb. 26, 2013 Specification ("Spec."), Abstract.) Claim 1 is illustrative, and is reproduced (with minor formatting changes) below:

> 1. A computer-implemented method for generating for a "Problem of TT.O and RS, PTR^{CT}" a data structure "PTR^{CT}-DS" for use by a computer expert system, the computer expert system executing the method having a processor for generating and a memory for storing PTR^{CT}-DS, the method comprising:
>
> receiving a document.0 and therein a claim with marked-up items ("doc.0-MUIs") of information disclosing a technical teaching TT.0, receiving a reference set RS of document.i with doc.i-MUIs disclosing technical teachings TT.i, i=1,2,3, .. , and writing all documenti, i=0,1 ,2, ... , and their MUIs into the PTR^{CT}-DS, any doc.i-MUl being called a subject matter item;
>
> receiving a context document, document.CT, comprising an authority's directives with doc.CT-MUIs of their wordings, and writing document.CT and its MUIs into the PTR^{CT}-DS, any doc.CT-MUl being called a legal item;
>
> and creating further subject matter and legal items by executing this method, comprising:
>
> **(a)** identifying doc.0-items of said claim of TT.0 in the following steps 1-3 as being
>
> **1)** one element of the claim and generating a set comprising exactly this claim element, and writing said set into the PTR^{CT}-DS;
>
> **2)** a property of said claim element and generating a set comprising this property, and writing said set into the PTR^{CT}-DS;
>
> **3)** one or more creative binary independent concepts - such that a conjunction of mirror predicates of the one or more creative binary independent concepts describes said property - and generating for each of said one or more creative binary

independent concepts a set comprising only the each of said one or more creative binary independent concepts, and writing said one or more sets into the PTR^{CT}-DS;

(b) generating for any set generated in (a) a set of doc.0-MUIs disclosing this set's element, and writing said set of doc.0-MUIs into the PTR^{CT}-DS;

(c) generating for any set generated in (b) a set of I.CTs justifying the element of this set by the user, and writing said set of I.CTs into the PTR^{CT}-DS;

repeating following steps (d)-(f) for any doc.i, i>0, and in said doc.i for any doc.0-item supposed to be peer to a doc.0 item as identified in (a)1 or (a)3;

(d) generating a set comprising for TT.i as doc.i-item

either a claim element of TT.i peer to the claim element in step (a)1 - if this peer claim element is not existent in doc.i, replacing by a dummy peer claim element or a binary independent concept of TT.i peer to the binary independent concept in step (a)3 - if this peer binary independent concept of TT.i is not existent or not equal to its peer binary independent concept in TT.0, replacing by a dummy peer concept and writing said set into the PTR^{CT}-DS;

(e) generating for any set generated in (d) a set of doc.i-MUIs disclosing in doc.i the item determined in (d), and writing said set into the PTR^{CT}-DS;

(f) generating for any set generated in (e) a set of I.CTs justifying elements in this set by the user, and writing said set into the PTR^{CT}-DS;

(g) generating a set of anticipation combinations (AC) combinable over sets of (d), and writing this set of ACs into the PTR^{CT}-DS;

(h) generating, for any AC generated in (g), a set of shortest sequences of QI-CCs such that AC/mod(QCC) ants TT.0, and writing said set into the PTR^{CT}-DS;

(i) generating, for any sequence of Q1 -CCs generated in (h), a set of I.CTs justifying this sequence by the user, and writing said set into the PTR^{CT}-DS;

(j) generating, for sets generated in (a)-(i), a set of one or more concatenations by natural language fragments of said sets representing a given test T- whereby the test T is defined to be a

set of argument chains showing that this test T holds for TT.0 over RS and level of knowledge according to doc.CT, whereby any argument chain is limited to comprising sets from (a)-(i) as links, which are glued together by natural language fragments - and writing said set of concatenations into the PTR^{CT}-DS;

(k) generating, for any set generated in (a)-(j), a real-time-access set facilitating a real-time dialog, and writing said set into the PTR^{CT}-DS.

Prior Art and Rejections on Appeal

The following table lists the prior art relied upon by the Examiner in rejecting the claims on appeal:

Szygenda et al. ("Szygenda")	US 2008/0086507 A1	Apr. 10, 2008
Charlesworth et al. ("Charlesworth")	US 2002/0052870 A1	May 2, 2002
Manual of Patent Examining Procedure, 8th ed., Rev. 1 ("MPEP")		Aug. 2001
Buckley et al., *SMART High Precision: TREC 7*, In E. Voorhees & D. Harman (Eds.), (p. 285-298). (NIST Special Publication 500-242.) ("Buckley")		1998

Claims 1–30 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. (*See* Final Office Action (mailed Sept. 26, 2014) ("Final Act.") 3–5.)

Claims 1–30 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. (*See* Final Act. 2–3.)

Claims 1–30 stand rejected under 35 U.S.C. § 112, second paragraph, as failing to comply with the definiteness requirement. (*See* Final Act. 5–7.)

Claims 1–30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Szygenda in view of MPEP. (*See* Final Act. 7–19.)

Claims 2–4, 12–14, and 22–30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Szygenda, in view of MPEP, and further in view of Buckley. (*See* Final Act. 20–35.)

Claim 21 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Szygenda, in view of MPEP, and further in view of Charlesworth. (*See* Final Act. 35–36.)

ANALYSIS

We have reviewed the Examiner's rejections in light of Appellant's arguments that the Examiner has erred. We are not persuaded that the Examiner erred in rejecting claims 1–30 for failing to comply with the enablement and definiteness requirements of 35 U.S.C. § 112. We are persuaded that the Examiner erred in rejecting claims 1–30 for failing to comply with the written requirement of 35 U.S.C. § 112. We also do not sustain the Examiner's rejections under 35 U.S.C. § 103 because we find the claims indefinite.

Written Description

The Examiner finds that claims 1–30 do not comply with the written description requirement because these claims "are replete with examples terms and steps that fail to comply with the written description requirement." (Final Act. 4.) According to the Examiner,

> claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor or a joint inventor, or for pre-AIA the inventor(s), at the time the application was filed, had possession of the claimed invention.

(Final Act. 3–4.)

To satisfy the written description requirement, "the [original] specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed." *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). The claimed invention need not be recited *in haec verba* in the original Specification to satisfy the written description requirement. *Id.* at 1352. "[T]he written description requirement is satisfied by the patentee's disclosure of 'such descriptive means as words, structures, figures, diagrams, formulas, etc., that fully set forth the claimed invention.'" *Enzo Biochem, Inc. v. Gen-Probe Inc.*, 323 F.3d 956, 969 (Fed. Cir. 2002) (quoting *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997)). We agree with Appellant that because the pending claim are very similar to the original claims, which are considered to be part of the original Specification (App. Br. 10), the pending claims are therefore supported by the original disclosure.

Accordingly, we do not sustain the Examiner's rejection of claims 1–30 as failing to comply with the written description requirement under 35 U.S.C. § 112, first paragraph.

Enablement

The Examiner finds that claims 1–30 do not comply with the enablement requirement because these claims "contain[] subject matter[,] which was not described in the [S]pecification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention." (Final Act. 2–3.) Appellant contends that "the Examiner has not considered <u>any</u> factor[s listed in *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988),] in reaching the conclusion that

the disclosure does not satisfy the enablement requirement." (App. Br. 8–9; Reply Br. 2–4.) According to Appellant, the factors to be considered:

> include, but are not limited to:
>
> 1. the breadth of the claims,
> 2. the nature of the invention,
> 3. the state of the prior art,
> 4. the level of one of ordinary skill,
> 5. the level of predictability in the art,
> 6. the amount of direction provided by the inventor,
> 7. the existence of working examples, and
> 8. the quantity of experimentation needed to make or use the invention based on the content of the disclosure.

(*Id.* at 9.)

Appellant has not persuaded us that the Examiner erred. We adopt the Examiner's findings in the Answer (Ans. 3–5) and Final Action (Final Act. 2–3) and we add the following primarily for emphasis. It is well-established law that the test for compliance with the enablement requirement in the first paragraph of 35 U.S.C. § 112 is whether the disclosure, as filed, is sufficiently complete to enable one of ordinary skill in the art to make and use the claimed invention without undue experimentation. *In re Wands*, 858 F.2d at 737 (setting forth eight factors to be considered to evaluate whether a disclosure would require undue experimentation). As an initial matter, we note that an Examiner is not required to provide a discussion as to every *Wands* factor. Here, while the Examiner has not couched the rejection under one or more of the *Wands* factors, it is clear from the Examiner's discussion that the Examiner considered some of these *Wands* factors. For example, the Examiner finds that "[t]here is no direction in the [S]pecification given

to how a user or person would go about accomplishing the steps of a-k as well as how a computer would automatically accomplish these same steps." (Ans. 4.) This shows that the Examiner has considered factors 6 (the amount of direction provided by the inventor) and 7 (the existence of working examples) of the *Wands* factors. Appellant, however, contends that one of ordinary skill in the art, which according to Appellant is "a Ph. D in Artificial Intelligence, semantic research or equivalents with significant experience and/or equivalent experience," would "be able to practice the invention without undue experimentation upon reading the [S]pecification as a whole with the various terms fully described as referred to in the terms index filed of record." (App. Br. 9–10.) Appellant's assertion in this regard, does not address the specific findings by the Examiner, and is mere attorney argument, a conclusory statement, which is unsupported by factual evidence. Thus, this argument is entitled to little probative value. *In re Lovin*, 652 F.3d 1349, 1357 (Fed. Cir. 2011); *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997); *In re De Blauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984).

Accordingly, we sustain the Examiner's rejection of claims 1–30 as failing to comply with the enablement requirement under 35 U.S.C. § 112, first paragraph.

Indefiniteness

The Examiner finds that claims 1–30 do not comply with 35 U.S.C. § 112, second paragraph because it is unclear what some of the claims encompass. (Final Act. 5–7.) According to the Examiner:

> claims 1-30 [are] replete with acronyms, symbols, notation, formulas and relations that render the claims indefinite because it is unclear what the terms mean and encompass. In claims 1-30 there are multiple examples of this such as: "PRT^{CT}",

> "document.0", "mark-up items", "document.i" "document.0-MUI's", "document-i-MUI's", "TT.0", "TT.i", "subject matter item", "context document", "authority's directives", "legal item", "element", "a property", "one or more creative binary independent concepts", "doc.i", "I.CT", "doc.0-item", "TT.i peer", "Q 1-CC", "AC/mode(Q-CC)", "a set of one or more concatenations", "a real-time-access set", "AD-TT.0-concept", "≡", "predicate", "AD-X.0.n, $1 \leq n \leq N$", "BID-TT.0-concept", "BID-C.0.k^n, $1 \leq k^n \leq K^n$, $\sum^{1 \leq n \leq N} K^n = N \leq K$", "mirror predicates", "BID-C.0.k^n", "BID-C.0.k^n", "SoDIS(Y.0)", "SoDIS(Y.0)-concept", "dis(y.0)", "Y.0", "SoJ(dis(y.0))-concept", "SoJ(dis(y.0))", "$1 \leq i \leq l$", "BID-C.i.k^n", "SoDis(Y.i)-concept", "SoDis(Y.i)", "SoJ(dis(y.i))-concept", "BID-AC-concept", PTR^{CT}, etc. The above listed are only examples and not entire list as the claims are replete with undefined acronyms, symbols, notations, formulas, and relations that render the claims indefinite. . . .

(Final Act. 5–7.) Appellant does not reply but instead contends that the "Answer has ignored Appellant's explanation at pages 10 – 12 of the main brief, explaining in detail where the various terms are in fact described in the [S]pecification, and thus Appellant's argument stands unrebutted on the record." (Reply 6.)

Section 112, second paragraph, requires that

> [t]he specification . . . conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." "As the statutory language of 'particular[ity]' and 'distinct[ness]' indicates, claims are required to be cast in clear—as opposed to ambiguous, vague, indefinite—terms. *In re Packard*, 751 F.3d 1307, 1313 (Fed. Cir. 2014);[2]

[2] Our reviewing court has held that when the USPTO has initially issued a well-grounded rejection that identifies ways in which the 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

see also In re Hammack, 427 F.2d 1378, 1382 (CCPA 1970) ("the essence of [the] requirement [under 35 U.S.C. § 112, second paragraph] is that the language of the claims must make it clear what subject matter they encompass.").

On the record before us, we do not find Appellant has met the burden to resolve the ambiguity of the claims identified by the Examiner. We adopt the Examiner's findings in the Answer (Ans. 6–9) and Final Action (Final Act. 5–7) and we add the following primarily for emphasis. The Examiner finds that the terms: BID-TT.0, BID-C.0.k^n, and Q1-CC are indefinite. (Final Act. 5.) Specifically, according to the Examiner, the terms:

> BID, BID-TT.0, BID-C.0.k^n, creative-binary independent concept, q1-cc and technical secondary fact are all indefinite as they are not clearly defined. [Specifically, t]he term BID is used throughout the specification and it has many variations such as BID-TT.0, BIDC.0.k^n, but at no point is a definition given BID and how a user or computer would identify. Th[is] leads to all of its variant terms being indefinite too. . . . The "Q1-CC" is used and is an acronym for "q-1-concept-creations" but there is no meaning to what is Q1-CC and what it entails and how to find it.

(Ans. 7.) Appellant does not address these specific findings by the Examiner, but instead contends in its Reply that "[t]he Answer has ignored Appellant's explanation at pages 10 – 12 of the main brief, explaining in detail where the various terms are in fact described in the [S]pecification, and thus Appellant's argument stands unrebutted on the record." (Reply 6.)

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failing to meet the statutory requirement that the claims be definite. *Id.* at 1313-1314. The court explained a satisfactory response can take the form of modification of the language identified as unclear, a separate definition of the unclear language, or, in appropriate circumstances, "persuasive explanation for the record of why the language at issue is not actually unclear." *Id.* at 1311.

However, the portions of the Appeal Brief cited by Appellant only discusses claims 8, 9, 18, and 19 in detail, which the Examiner addresses in the Answer. (App. Br. 10–12; Ans. 6–9.) Therefore, Appellant has not persuaded us that the Examiner has erred.

Accordingly, we sustain the Examiner's rejection of claims 1–30 as failing to comply with the definiteness requirement under 35 U.S.C. § 112, second paragraph.

Prior Art Rejection

The Examiner finds claims 1–30 unpatentable under 35 U.S.C. § 103(a). (*See* Final Act. 7–36.) Based on the above analysis, however, the prior art rejections of claims 1–30 under 35 U.S.C. § 103(a) must fall because they are necessarily based on a speculative assumption as to the meaning of these claims. *See In re Steele*, 305 F.2d 859, 862–63 (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 basing a rejection under 35 U.S.C. § 103 thereon). It should be understood, however, that our decision in this regard is based on the indefiniteness of the claimed subject matter, and does not reflect on the adequacy of the prior art evidence applied in support of these rejections.[3]

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[3] We note that Appellant's briefs fail to address the Examiner's specific findings regarding the prior art rejection. *In re Lovin*, 652 F.3d at 1357 (holding 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."); *In re Geisler*, 116 F.3d at 1470; *In re De Blauwe*, 736 F.2d at 705. In fact, Appellant has not presented any cogent arguments sufficient to address the Examiner's detailed position and instead assert, without elaboration or specific criticism of the Examiner's detailed findings, that the references do not disclose the limitations of the independent claims.

Accordingly, we do not sustain the Examiner's rejections of claims 1–30 under 35 U.S.C. § 103(a).

DECISION

We sustain the decision of the Examiner to reject claims 1–30 for failing to comply with the enablement and definiteness requirements of 35 U.S.C. § 112.

We do not sustain the decision of the Examiner to reject claims 1–30 for failing to comply with the written requirement of 35 U.S.C. § 112.

We also do not sustain the Examiner's rejections of claims 2–4, 12–14, and 21–30 under 35 U.S.C. § 103 because we find the claims indefinite.

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

Furthermore, should there be further prosecution, we recommend that the Examiner also review the claims under *Alice Corp. Ptd. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014).