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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/963,707	08/09/2013	Qi Qi	IPCPA17852008/CITYP102USB	4127

23623 7590 11/02/2016
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EXAMINER

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ART UNIT	PAPER NUMBER
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3992

NOTIFICATION DATE	DELIVERY MODE
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11/02/2016

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte QI QI, TIAN-MING BU, and XIAOTIE DENG

Appeal 2016-007365
Application 13/963,707¹
Patent 7,996,267 B1
Technology Center 3900

Before ALLEN R. MACDONALD, KEN B. BARRETT, and
CYNTHIA L. MURPHY, *Administrative Patent Judges*.

MacDONALD, *Administrative Patent Judge*.

DECISION ON APPEAL²

¹ Filed August 9, 2013, seeking to reissue U.S. Patent 7,996,267 B2, issued August 9, 2011, based on Application 12/436,700, filed May 6, 2009, which claims benefit of Provisional Application 61/051,144, filed May 7, 2008.

² The real party in interest is City University of Hong Kong. App. Br. 2.

STATEMENT OF THE CASE

Introduction

Appellants appeal under 35 U.S.C. § 134 from a Final Rejection of claims 1–22. We have jurisdiction under 35 U.S.C. § 6(b).

Appellants’ Invention

This invention relates to “[s]ystems and methods for facilitating more efficient bidding in an ad-words auction.” Abstract. Particularly, “[a]n auctioning component can employ a forward-looking Nash equilibrium to facilitate an ad-words auction. A bidding component can enable bidding agents to place bids in the ad-words auction as a function of dynamically considering at least existing strategies of other bidding agents and future responses of the other bidding agents.” *Id.*

Exemplary Claims

Exemplary claim 1 under appeal read as follows:

1. A system comprising:
a memory having stored therein computer executable components that, when executed by a processor of the system, cause the system to:
employ a forward looking Nash equilibrium to conduct an Internet ad-words auction of Internet advertisement slots;
and
generate and transmit bids in the Internet ad-words auction based on dynamically considering at least existing strategies of other bidding agents and future responses of the other bidding agents.

Rejection

1. The Examiner rejected claims 1–22 under 35 U.S.C. § 101 as being directed to non-statutory subject matter (Final Act. 3–7; Ans. 4–10).³

Appellants’ Contentions

1. Appellants contend that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 101 because:

Appellant rebuts the pertinency of the [*Alice*] decision to the present application since the type of invention involved in *Alice Corporation Pty. Ltd. v. CLS Bank International*, 573 US ___ (2014) (a well[-]known and ancient business practice by human beings merely reduced to execution by computers) is clearly distinguishable from the novel and non-obvious improvements over existing technological systems (e.g., existing computerized auction systems, existing computerized advertisement brokering systems, existing computerized advertisement analytics systems, etc.) disclosed by the present application, and thus the present application is a clear improvement over existing computerized technologies.

App. Br. 16.

³ We select claim 1 as representative. Separate patentability, in compliance with 37 C.F.R. § 41.37(c)(iv), is not argued for claims 2–22. As to independent claims 10, 17, 21, and 22, Appellants merely repeat for these claims (App. Br. 25–61) the arguments directed to claim 1. As to dependent claims 2–9, 11–16, and 18–20, Appellants merely quote the claim and repeat for these claims (App. Br. 61–68) a legal argument directed to claim 1. *Cf.* Ans. 10 (The Examiner addressing Appellants’ failure to substantively address the dependent claims.)

While repetition of an argument for patentability of a first claim as an argument for a second claim might outwardly appear to be a separate argument for patentability of the second claim, such a repeated argument is not in fact an argument for “separate patentability.” Except for our ultimate decision, the § 101 rejection of claims 2–22 is not discussed further herein.

Moreover, the various embodiments of the present application provide improvements to the functionality and use of a conventional computerized device (e.g., a server, computer, controller device, a wireless device, etc.) with respect to employing a forward looking Nash equilibrium to conduct an Internet ad-words auction of Internet advertisement slots.

App. Br. 16–17.

2. Further, Appellants contend that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 101 because:

[W]ith the present claims, there are several particular limitations that also remove them from being abstract, for example claim 1 recites, in part:

employ a forward looking Nash equilibrium to conduct an Internet ad-words auction of Internet advertisement slots; and

generate and transmit bids in the Internet ad-words auction based on dynamically considering at least existing strategies of other bidding agents and future responses of the other bidding agents

(emphasis added)

As the particular claim limitations of *A system comprising: a memory having stored therein computer executable components that, when executed by a processor of the system, cause the system to: employ a forward looking Nash equilibrium to conduct an Internet ad-words auction of Internet advertisement slots; and generate and transmit bids in the Internet ad-words auction based on dynamically considering at least existing strategies of other bidding agents and future responses of the other bidding agents* necessarily remove the claim from being a mere abstract idea per Part 1 of the [Alice] analysis.

App. Br. 18.

3. Appellants contend that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 101 because:

It is clear that the claims are clearly restricted to the application of employing a **forward looking Nash equilibrium** to conduct an **Internet ad-words** auction of **Internet advertisement slots**.

Pre-emption of a field by a claim to an abstract idea was a major main concern of the Supreme Court in *Alice*. There, the Supreme Court emphasized that “the concern that drives this exclusionary principle [that abstract ideas cannot be patented] is one of pre-emption.” That is, the Court does not want to allow an inventor to “effectively grant a monopoly over an abstract idea”. However, the Court very clearly cautioned that it treads carefully in construing this exclusionary principle “lest it swallow all of patent law,” since all inventions embody, use, reflect, rest upon, or apply abstract ideas. Moreover, an invention is not rendered ineligible for patent simply because it involves an abstract concept.

The Court further explained how it is important to distinguish between patents that claim the building blocks of human ingenuity and those that integrate the building blocks into something more, thereby transforming them into a patent-eligible invention, which poses no risk of preemption, and therefore remain eligible for the monopoly granted under our patent laws. In view of the discussion *supra*, the claims clearly do not preempt or cover the full abstract idea of “conducting an auction”, and thus are eligible for patent protection under 35 U.S.C. § 101.

App. Br. 21.

4. Appellants contend that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 101 because as in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1255 (Fed. Cir. 2014):

The subject claims are directed to a particular computerized online auction centric problem that did not exist before the recently developed advanced technologies associated

with computer networks, and do not recite a commonplace business method aimed at processing business information, applying a known business process to the particular technological environment of the Internet, or creating or altering contractual relations using generic computer functions and conventional network operations. Specifically, *A system comprising: a memory having stored therein computer executable components that, when executed by a processor of the system, cause the system to: employ a forward looking Nash equilibrium to conduct an Internet ad-words auction of Internet advertisement slots; and generate and transmit bids in the Internet ad-words auction based on dynamically considering at least existing strategies of other bidding agents and future responses of the other bidding agents* was not a known business process as evidenced by the indication of allowable subject matter in independent claim 1.

App. Br. 22.

5. Appellants contend that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 101 because:

We further note that the Office Action fails to address each element of the independent claim separately as required under the law in a 35 U.S.C. § 101 analysis of patent-eligible subject matter, and instead makes a general blanket assertion regarding all of the claims as “conducting an auction”. As such, the Office Action has not made a prima facie case that the independent claim is abstract and not patentable subject matter if the Office Action has not addressed each element of the claim in the 101 rejection.

App. Br. 24–25.

6. Appellants contend that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 101 because:

The rejection has clearly merely listed the claim elements and described them at a high level of abstraction that is untethered from the language of the claim when determining the

focus of the claimed invention. Additionally, in using this high level of abstraction, the rejection has erroneously applied the “directed to” inquiry, and thus has not determined whether the whole of the claims in view of the specification is directed to a patent ineligible concept.

Reply Br. 26.

7. Appellants contend that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 101 because:

[I]n view of the fact that the Office Action has not rejected the claims under 35 U.S.C. § 102 and 35 U.S.C. § 103, which govern novelty and nonobviousness, the claims are directed to subject matter that was **not** well-understood, routine and conventional activities previously known to the auction industry.

Reply Br. 26.

ISSUES

1) Did the Examiner err in rejecting claim 1 under 35 U.S.C. § 101 because, under the *Alice* § 101 analysis, claim 1 recites something significantly more than the purported abstract idea?

2) Did the Examiner err in rejecting claim 1 under 35 U.S.C. § 101 because the Examiner fails to establish a proper prima facie case that the claim is directed to ineligible subject matter (e.g., abstract idea)?

PRINCIPLES OF LAW

A) *In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011)

As this court has repeatedly noted, “the prima facie case is merely a procedural device that enables an appropriate shift of the burden of production.” *Hyatt v. Dudas*, 492 F.3d 1365, 1369 (Fed.Cir.2007) (citing *In re Oetiker*, 977 F.2d 1443, 1445 (Fed.Cir.1992)). See also *In re Piasecki*, 745 F.2d 1468, 1472

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(Fed.Cir.1984). The Patent and Trademark Office (“PTO”) satisfies its initial burden of production by “adequately explain[ing] the shortcomings it perceives so that the applicant is properly notified and able to respond.” *Hyatt*, 492 F.3d at 1370. In other words, the PTO carries its procedural burden of establishing a prima facie case when its rejection satisfies 35 U.S.C. § 132, in “notify[ing] the applicant . . . [by] stating the reasons for [its] rejection, or objection or requirement, together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application.” 35 U.S.C. § 132. That section “is violated when a rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection.” *Chester v. Miller*, 906 F.2d 1574, 1578 (Fed.Cir.1990).

In re Jung, 637 F.3d 1356, 1362 (Fed. Cir. 2011).

“Section 132 merely ensures that an applicant at least be informed of the broad statutory basis for the rejection of his claims, so that he may determine what the issues are on which he can or should produce evidence.” *Chester*, 906 F.2d at 1578 (internal citation omitted). As discussed above, all that is required of the office to meet its prima facie burden of production is to set forth the statutory basis of the rejection and the reference or references relied upon in a sufficiently articulate and informative manner as to meet the notice requirement of § 132. As the statute itself instructs, the examiner must “notify the applicant,” “stating the reasons for such rejection,” “together with such information and references as may be useful in judging the propriety of continuing prosecution of his application.” 35 U.S.C. § 132.

In re Jung, 637 F.3d at 1363.

It is well-established that the Board is free to affirm an examiner’s rejection so long as “appellants have had a fair opportunity to react to the thrust of the rejection.” *In re Kronig*, 539 F.2d 1300, 1302-03 (CCPA 1976).

In re Jung, 637 F.3d at 1365.

B) Alice Corp. v. CLS Bank Int'l, 134 S. Ct. 2347, 2355 (2014).

[T]he Supreme Court set forth an analytical framework under § 101 to distinguish patents that claim patent-ineligible laws of nature, natural phenomena, and abstract ideas—or add too little to such underlying ineligible subject matter—from those that claim patent-eligible applications of those concepts. First, given the nature of the invention in this case, we determine whether the claims at issue are directed to a patent-ineligible abstract idea. *Alice Corp. v. CLS Bank Int'l*, — U.S. —, 134 S.Ct. 2347, 2355, 189 L.Ed.2d 296 (2014). If so, we then consider the elements of each claim—both individually and as an ordered combination—to determine whether the additional elements transform the nature of the claim into a patent-eligible application of that abstract idea. *Id.* This second step is the search for an “inventive concept,” or some element or combination of elements sufficient to ensure that the claim in practice amounts to “significantly more” than a patent on an ineligible concept. *Id.*

DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245, 1255
(Fed. Cir. 2014).

ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellants’ arguments that the Examiner has erred. We disagree with Appellants’ conclusions and concur with the conclusions reached by the Examiner. Except as noted below, we 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 set forth by the Examiner in the Examiner’s Answer in

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response to Appellants' Appeal Brief. We highlight the following additional points.

As to Appellants' above contentions 1–4, we disagree that the cited case law establishes error in the Examiner's § 101 analysis. Appellants acknowledge that an Examiner may establish a prima facie case that the claims are directed to patent-ineligible subject matter using the two-part analysis outlined in *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014). (App. Br. 12). However, Appellants follow this by citing only to numerous non-binding decisions of this Board (e.g., *PNC Bank v. Secure Access, LLC*, CBM2012-00100, PTAB, September 9, 2014) and the District Courts (*Tuxis Technologies, LLC v. Amazon.com, Inc.* US District Court Delaware, Civil Action No. 13-1771-RGA, September 3, 2014) and but a single decision of our reviewing court (i.e., *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014)), while overlooking numerous highly relevant Federal Circuit decisions that contradict Appellants' arguments (e.g., *Ulramercial, Inc. v. Hulu, LLC*, 772 F.3d 709 (Fed. Cir. 2014)). Further, in citing to *DDR Holdings*, Appellants also overlook those relevant portions of *DDR Holdings* that contradict Appellants' arguments. Such an analysis of the case law is inherently unpersuasive.

As to Appellants' above contentions 5–6, we disagree that the Examiner's § 101 analysis is incomplete, overly general, untethered from claim language, or otherwise flawed. First, Appellants argue that to establish a prima facie case, the examiner must perform particular required steps (i.e., “address each element of the independent claim separately”). App. Br. 24. Appellants go on to state that this is “required under the law in

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a 35 U.S.C. § 101 analysis of patent-eligible subject matter”. App. Br. 24. Contrary to Appellants’ position, the law sets forth no such requirement. Rather, 35 U.S.C. § 132 sets forth a more general prima facie notice requirement. We review Appellants’ prima facie arguments under the same standard we would any prima facie argument. We determine whether the Examiner notified the applicant, stating the reasons for the rejection together with such information as may be useful in judging the propriety of continuing prosecution of his application. 35 U.S.C. § 132.

Appellants acknowledge (App. Br 17):

The Office Action asserts:

In the instant case, Examiner has identified the claims as falling within one of the four statutory categories (step 1). The Examiner then identified the claims as being directed to a judicial exception, in particular, conducting auctions, which is considered to be an abstract idea inasmuch as such activity is considered both a fundamental economic practice and a method of organizing human activity (2A). Both fundamental economic practices and methods of organizing human activities are types of concepts that have been identified by the courts as abstract ideas (CBT Slides at 15).

Final Act. 3. Appellants then state:

Appellant respectfully disagrees with this analysis. The Office Action seems to gloss over the particular limitations of the claims that narrow substantially the reach of the claims in the overall field of “conducting auctions”.

App. Br. 17. We disagree.

Regarding step 1 of *Alice*, we conclude that the Examiner’s statement, which Appellants acknowledge they have read, is sufficient to place

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Appellants on notice as to step 1 of *Alice* as required under 35 U.S.C. § 132. Further, Appellants' understanding of the Examiner's rejection on this point was manifested by their response to the Office Action. Appellants did not respond by asserting that they did not understand the Examiner's rejection. Instead, Appellants presented above contentions 1 and 2, which we address above. See *In re Jung*, 637 F.3d 1356 (Fed. Cir. 2011). On the issue of prima facie notice, particularly to anticipation but also generally, our reviewing court was clear in *Jung* that:

There has never been a requirement for an examiner to make an on-the-record claim construction of every term in every rejected claim and to explain every possible difference between the prior art and the claimed invention in order to make out a prima facie rejection.

637 F.3d at 1363. The Federal Circuit further stated:

“[Section 132] does not mandate that in order to establish prima facie anticipation, the PTO must explicitly preempt every possible response to a section 102 rejection. Section 132 merely ensures that an applicant at least be informed of the broad statutory basis for the rejection of his claims, so that he may determine what the issues are on which he can or should produce evidence.” *Chester*, 906 F.2d at 1578 (internal citation omitted). As discussed above, all that is required of the office to meet its prima facie burden of production is to set forth the statutory basis of the rejection and the reference or references relied upon in a sufficiently articulate and informative manner as to meet the notice requirement of § 132. As the statute itself instructs, the examiner must “notify the applicant,” “stating the reasons for such rejection,” “together with such information and references as may be useful in judging the propriety of continuing prosecution of his application.” 35 U.S.C. § 132.

Id. Again, we conclude the Examiner's discussion was more than sufficient to meet this burden as to *Alice* step 1.

Additionally, regarding step 2 of *Alice*, we also find unpersuasive Appellants' argument that notice was lacking. We conclude that the Examiner's analysis and remarks (Final Act. 7–8 and the paragraph bridging 4–5), are sufficient to place Appellants on notice as to step 2 of *Alice* as required under 35 U.S.C. § 132. Further, Appellants' understanding of the Examiner's rejection on this point was manifested by their response to the Office Action. Appellants did not respond by asserting that they did not understand the Examiner's rejection. Instead, Appellants presented above contentions 3 and 4, which we address above.

As to Appellants' above contention 7, we disagree that the absence of a prior art rejection is indicative of error in the Examiner's § 101 analysis. We discern no connection between the lack of a prior art rejection under 35 U.S.C. § 102 or 35 U.S.C. § 103, and the claimed subject matter thus being patent eligible under 35 U.S.C. § 101.

CONCLUSIONS

- (1) The Examiner has not erred in rejecting claims 1–22 as being unpatentable under 35 U.S.C. § 101.
- (2) Claims 1–22 are not patentable.

DECISION

The Examiner's rejection of claims 1–22 under 35 U.S.C. § 101 is affirmed.

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).

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AFFIRMED