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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DANIEL R. SWANSON SR.

Appeal 2016-006109
Application 12/315,688¹
Technology Center 3600

Before ST. JOHN COURTENAY III, LARRY J. HUME,
and NORMAN H. BEAMER, *Administrative Patent Judges*.

BEAMER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's non-final rejection of claims 1–10, 17–19, and 22–29. Claims 11–16, 20, and 21 are withdrawn. We have jurisdiction over the pending rejected claims under 35 U.S.C. § 6(b).

We affirm.

¹ Appellant identifies Swanson International, Incorporated as the real party in interest. (App. Br. 4.)

THE INVENTION

Appellant's disclosed and claimed invention is directed to classifying advertising based on referencable attributes. (Abstract.) Independent claim 1, reproduced below, is illustrative of the subject matter on appeal:

1. A system comprising:

an input apparatus to facilitate identification and recording of individual customer advertising preferences that are specified by the customer and directly identify classifications of advertisements that are of interest to the individual customer;

a content provider device to distribute content to the individual customer, wherein the content provider device is configured to receive an indication that the individual customer is viewing the distributed content;

an advertising placement system that uses the customer advertising preferences for advertising, calculates each advertisement's valuation for each individual customer as a function of the customer advertising preferences and a preliminary value set by an advertiser or an agent of the advertiser that indicates how much distributed content the advertisement will pay for, wherein the valuation includes the preliminary value modified by a plurality of valuation modifiers, wherein the valuation modifiers are real numbers, wherein the plurality of valuation modifiers are provided by the advertiser or the agent of the advertiser, wherein the plurality of valuation modifiers each indicate a value to be added or subtracted from the preliminary value if the classification identified by a customer user's advertising preference matches a classification of the at least one advertisement, wherein the preliminary value is modified in accord with the plurality of valuation modifiers to create the valuation, wherein the valuation of the at least one advertisement as modified by the plurality of valuation modifiers is greater than or equal to a threshold value needed to pay for a required valuation of a defined portion of the distributed content, wherein the valuation is a real number, wherein the required valuation is provided by

a provider of the distributed content or an agent of the provider, and wherein the valuation corresponds to a monetary value, wherein the preliminary value is set as a function of a location of the customer, the advertising placement system selects and inserts the advertisement at an identified point inside the distributed content such that a presentation device performs the advertisement within the distributed content provided to the individual customer; and

wherein the advertising placement system is configured to insert the at least one advertisement into the content as a function of the indication, the individual customer's advertising preferences, and the valuation of the at least one advertisement.

REJECTIONS

The Examiner rejected claims 1–10, 17–19, and 22–29 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. (Non-Final Act. 4.)

The Examiner rejected claims 1–3, 6, 17–19, and 23–29 under 35 U.S.C. § 103(a) as being unpatentable over Huber et al. (US 2004/0261100 A1, pub. Dec. 23, 2004), Kenderov et al. (US 8,102,422 B1, issued Jan. 24, 2012), Grois (US 2008/0256064 A1, pub. Oct. 16, 2008), and Dominowska et al. (US 2009/0144207 A1, pub. June 4, 2009). (Non-Final Act. 5–10.)

The Examiner rejected claims 4, 5, 7–10, and 22 under 35 U.S.C. § 103(a) as being unpatentable over Huber, Kenderov, Grois, Dominowska, and official notice. (Non-Final Act. 10–15.)²

² A double patenting rejection has been withdrawn. (Ans. 2.)

ISSUES ON APPEAL

Appellant's arguments in the Appeal Brief present the following dispositive issues:³

Issue One: Whether the pending claims are directed to non-statutory subject matter. (App. Br. 24–37.)

Issue Two: Whether the Examiner erred in finding the combination of Huber, Kenderov, Grois, and Dominowska teaches or suggests the independent claim 1 limitation, “wherein the valuation includes the preliminary value modified by a plurality of valuation modifiers,” and the commensurate limitations of independent claims 6, 17–19, 23, and 24, and whether the Examiner erred in finding the combination of Huber, Kenderov, Grois, Dominowska, and official notice teaches or suggests the commensurate limitation of independent claim 22. (App. Br. 40–45.)

ANALYSIS

We have reviewed the Examiner's rejections in light of Appellant's arguments the Examiner erred. With respect to the non-statutory subject matter rejection, we disagree with Appellant's arguments, and we adopt as our own (1) the pertinent findings and reasons set forth by the Examiner in the Action from which this appeal is taken (Non-Final Act. 4) and (2) the corresponding findings and reasons set forth by the Examiner in the Examiner's Answer in response to Appellant's Appeal Brief. (Ans. 2–9.)

³ Rather than reiterate the arguments of Appellant and the positions of the Examiner, we refer to the Appeal Brief (filed July 20, 2015) (herein, “App. Br.”); the Reply Brief (filed May 31, 2016) (herein, “Reply Br.”); the Non-Final Office Action (mailed Dec. 18, 2014) (herein, “Non-Final Act.”); and the Examiner's Answer (mailed Mar. 30, 2016) (herein, “Ans.”) for the respective details.

We concur with the applicable conclusions reached by the Examiner, and emphasize the following.

Issue One

The Examiner concludes the pending claims are patent-ineligible under 35 U.S.C. § 101:

[T]he claims are directed towards the concept of assigning values to ads based on customer response/feedback. These actions are fundamental economic practices that are simply derived by a series of mathematical formulations; therefore, the claims are drawn to an abstract idea.

(Non-Final Act. 4.) In addition, the Examiner concludes:

The claims do not recite limitations that are “significantly more” than the abstract idea because the claims do not recite an improvement to another technology or technical field, an improvement to the functioning of the computer itself, or meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment. It should be noted that the limitations of the current claims are performed by the generically recited computer. The limitations are merely instructions to implement the abstract idea on a computer and require no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry.

(*Id.*)

Appellant argues the Examiner incorrectly describes the subject matter of the claims:

Appellant contends that the claims are not directed to what the Examiner states. The claims are directed to providing an [sic] individual advertisements based on individual user specified advertising preferences, valuing the advertisements for each individual user, and inserting advertisements determined to be of sufficient value in content. In this way, each individual user

can receive ads targeted directly to that individual. While, each of the claims do include determining values for respective advertisements based on user specified advertising preferences, the claims recite more than the generic abstract idea cited by the Examiner.

(App. Br. 25.) In elaboration, Appellant enumerates the claim limitations, characterizing them as steps in a “specific value methodology” that requires “input from at least three separate entities (advertiser, content provider, and user).” (See App. Br. 25–27) Based on these specific limitations, Appellant maintains, “[t]hese recitations alone make the claims directed to more than an abstract idea and do not unduly preempt others from innovating in the area of the abstract idea cited by the Examiner.” (App. Br. 26.) Appellant further argues, *inter alia*, the Examiner has failed to provide substantial evidence in support of the rejection, and the claims are not directed to subject matter that the Courts have identified as falling within the established exceptions to subject matter eligibility. (App. Br. 28–34.)

Appellant also argues the claims recite significantly more than an abstract idea — “The claims . . . provide a technical solution to the technical problem of providing individually tailored advertisements to individual users.” (App. Br. 34.) In particular, Appellant characterizes the invention of the claims as “rifle shot targeting” where “people get only those ads they care about.” (App. Br. 36 (internal quotes omitted).)

We are not persuaded by Appellant’s arguments. We adopt the Examiner’s findings and conclusions provided in the Non-Final Office Action and Answer. (Non-Final Act. 4; Ans. 2–9.) The Supreme Court has long held that “[l]aws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347,

2354 (2014) (quoting *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013)). The “abstract ideas” category embodies the longstanding rule that an idea, by itself, is not patentable. *Alice Corp.*, 134 S. Ct. at 2354–55 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

In *Alice*, the Supreme Court sets forth an analytical “framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Id.* at 2355. The first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” such as an abstract idea. *Id.* If the claims are directed to a patent-ineligible concept, the second step in the analysis is to consider the elements of the claims “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 79, 78 (2012)). In other words, the second step is to “search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* (quoting *Mayo*, 566 U.S. at 73.) The prohibition against patenting an abstract idea “‘cannot be circumvented by attempting to limit the use of the formula to a particular technological environment’ or adding ‘insignificant postsolution activity.’” *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010) (internal citation omitted.)

Turning to the first step of the *Alice* inquiry, we agree with the Examiner that Appellant’s claims are reasonably characterized as directed to

an abstract idea of “assigning values to ads based on customer response/feedback.” (Non-Final Act. 4.) The limitations recited in the claims and itemized by Appellant are broadly consistent with, and merely elaborate on, the Examiner’s characterization — for example:

- recording individual customer advertising preferences
- consideration of the location of the user
- distribution of content to individual customers, and obtaining an indication when the content is viewed
- calculating an advertisement’s valuation
- providing required valuation by a provider of the distributed content
- inserting advertisements into the media content
- inserting different advertisements when a different customer is viewing
- recording advertisement valuation and placement decisions in a database

Appellant argues there is no substantial evidence that “[t]hese actions are fundamental economic practices that are simply derived by a series of mathematical formulations.” (App. Br. 28.) “Patent eligibility under § 101 presents an issue of law.” *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1340 (Fed. Cir. 2013). There is no requirement that an examiner cite evidentiary support to conclude that a claim is directed to a patent-ineligible concept, such as an abstract idea.⁴

⁴ See, e.g., para. IV, “JULY 2015 UPDATE: SUBJECT MATTER ELIGIBILITY” to 2014 INTERIM GUIDANCE ON PATENT SUBJECT MATTER ELIGIBILITY (2014 IEG), 79 Fed. Reg. 74618 (Dec. 16, 2014) (“The courts consider the determination of whether a claim is eligible (which involves identifying whether an exception such as an abstract idea is being

In any event, aside from whether or not the art of record establishes obviousness of the claimed subject matter, that record establishes that assigning values to ads based on customer response/feedback, as well as related actions such as selecting ads for insertion into media content based on such values are well established and fundamental economic practices:

- calculating charges for advertisements; determine the adjusted revenue total for the advertisement. (Dominowska Abstract.)
- pricing advertisements to be presented within a document, according to their relevance to user's search query; determining the relevance weight of said advertisement to said at least one keyword. (Grois Abstract.)
- conditionally presenting selected categories of advertising to viewers; viewer requests for categories of advertisements or for specific advertisements may be processed. (Huber Abstract.)
- option is presented to the user to receive advertisement content, where the advertisement content is selected based on the behavior. (Kenderov Abstract.)

There is no definitive rule to determine what constitutes an “abstract idea.” Rather, the Federal Circuit has explained that “both [it] and the Supreme Court have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016); *see also Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (explaining that, in determining whether claims are

claimed) to be a question of law. Accordingly, courts do not rely on evidence that a claimed concept is a judicial exception, and in most cases resolve the ultimate legal conclusion on eligibility without making any factual findings.” (emphasis added) (footnote omitted)).

patent-eligible under § 101, “the decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided”). The Federal Circuit also noted that “examiners are to continue to determine if the claim recites (i.e., sets forth or describes) a concept that is similar to concepts previously found abstract by the courts.” *Amdocs*, 841 F.3d at 1294 n.2 (internal citation omitted.)

Here, the claims are similar to the claims that the Federal Circuit determined are patent ineligible in *Electric Power Group*, 830 F.3d at 1353–54 (collecting information and “analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, [are] essentially mental processes within the abstract-idea category”). The Federal Circuit has also held similar data manipulation claims to be directed to patent-ineligible abstract idea—see *Digitech Image Techs., LLC v. Elecs. For Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014) (employing mathematical algorithms to manipulate existing information); *OIP Tech., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) (offer-based price optimization); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1370 (Fed. Cir. 2015) (tailoring information presented to a user based on particular information); *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1346 (Fed. Cir. 2013) (generating tasks in an insurance organization); and *Versata Dev. Grp. v. SAP Am.*, 793 F.3d 1306, 1333–34 (Fed. Cir. 2015) (price-determination method involving arranging organizational and product group hierarchies).

Appellant’s argument that the claims require separate inputs from the advertiser, the content provider, and the user is not inconsistent with the

Examiner’s conclusions. These aspects of the claims constitute gathering of pre-solution information which is then analyzed via an algorithm readily performed mentally or by pencil and paper by a human being. *See, CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011); *Fairwarning IP, LLC v Iatric Systems, Inc.*, 839 F.3d 1089, 1096 (Fed. Cir. 2016) (“claims that add the requirement that the system include a ‘user interface’ for selection of a rule” do not recite significantly more to make claims patent eligible.) As stated in the Specification, “algorithms described herein may be implemented in software or a combination of software and human implemented procedures. . . .” (Spec. ¶ 32.)

In addition, Appellants’ argument that the claims do not preempt all methods of assigning values to ads based on customer response/feedback do not make them any less abstract. *See buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (collecting cases); *Accenture*, 728 F.3d at 1345; *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (“While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility”).

Turning to the second step of the *Alice* inquiry, we find nothing in the claims that adds anything “significantly more” to transform the abstract concept of assigning values to ads based on customer response/feedback. *Alice*, 134 S. Ct. at 2357. Beyond that abstract idea, the claims merely recite “‘well-understood, routine, conventional activit[ies],” either by requiring conventional computer activities (such as database storage), conventional media distribution components (such as set-top boxes), or routine data-gathering steps. (Spec. ¶¶ 45, 106, Fig. 1.) *Alice*, 134 S. Ct. at 2359

(quoting *Mayo*, 566 U.S. at 73). Considered individually or taken together as an ordered combination, the claim elements fail “to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Id.* at 2357 (quoting *Mayo*, 566 U.S. at 72–73, 78).

Appellant argues the claimed subject matter “provide[s] a technical solution to the technical problem of providing individually tailored advertisements to individual users.” (App. Br. 34.) However, as discussed above, the “solution” is an abstract algorithm that “may be implemented in software or a combination of software and human implemented procedures. . . .” (Spec. ¶ 32.) Nor are the claims “directed to a specific improvement to computer functionality,” instead relating to “use of [] abstract mathematical formula[s] on any general purpose computer.” *Enfish*, 822 F.3d at 1338. As stated in the Specification, the claimed “advertising placement system” may be “any general-purpose computing system using Linux, Unix, Windows, Apple or any operating system.” (Spec. ¶ 59.)

Because Appellant’s claims are directed to a patent-ineligible abstract concept and do not recite something “significantly more” under the second prong of the *Alice* analysis, we sustain the Examiner’s 35 U.S.C. § 101 rejection of the pending claims.

Issue Two

In finding the cited art teaches or suggests the independent claim limitation, “wherein the valuation includes the preliminary value modified by a plurality of valuation modifiers,” the Examiner refers only to Huber and Kenderov:

Kenderov fails to explicitly disclose a method in which said valuation is determined as an initial value (i.e. prior to the ad being presented to the customer). However, it would have

been obvious to one of ordinary skill in the art at the time of the invention to perform said valuation at any time during the advertising process. One would have been motivated to do this in order to provide a baseline value prior to its modification by the valuation modifiers.

Huber also fails to explicitly disclose a method wherein the initial valuation is modified by a plurality of valuation modifiers, wherein the plurality of valuation modifiers are provided by the advertiser or the agent of the advertiser, wherein the plurality of valuation modifiers each indicate a value to be added or subtracted to the initial valuation if the customer user's advertising preference matches a classification of the at least one advertisement, and wherein the initial valuation is altered in accord with the plurality of valuation modifiers.

While neither Huber nor Kenderov disclose this limitation, it would have been obvious to one of ordinary skill in the art to modify the Huber/Kenderov combination in this fashion. To reiterate, Kenderov discloses a method in which an ad is priced/valued as a function of the customer's advertising preferences that are specified by the customer, and wherein the ad is presented as a function of the valuation (Fig. 7; Column 4, Lines 3-9; Column 9, Lines 13-21). However, the aforementioned limitation merely adds or subtracts from a baseline value of an ad as a function of a user's response. For example, if a user makes a purchase in response to the ad or otherwise indicates their preference for an ad, the value of that ad would go up. Conversely, if a user merely clicks through an ad without viewing it, the value of the ad would go down.

(Non-Final Act. 6-7.)

Appellant argues the Examiner does not address the requirement that the preliminary value be "set by an advertiser or an agent of the advertiser," and the Examiner uses "impermissible hindsight." (App. Br. 41-43.) Appellant also argue the Examiner errs in finding obvious adjusting the value of an ad as a function of a user "mak[ing] a purchase in response to the

ad or otherwise indicat[ing] their preference for an ad,” whereas the claims require adjusting the value prior to presenting the ad to the user. (App. Br. 43–44.) In sum, Appellant argues, “what is stated as obvious is not what is recited in the claims and the Examiner has failed to properly address each and every limitation of the claims as required to establish a *prima facie* case of obviousness.” (App. Br. 44.) The Examiner does not address these arguments in the Answer, other than to generally dispute resort to improper hindsight. (Ans. 10.)

We agree with Appellant’s arguments. The Examiner’s conclusory finding that the claim limitation at issue is obvious even though it is not disclosed in any of the cited references is not sufficiently supported by evidence or reasoned analysis. Therefore, on the record before us, we are constrained to find the Examiner erred in rejecting independent claims 1, 6, 17–19, and 22–24 as obvious.

CONCLUSION

For the reasons stated above, we sustain the Examiner’s rejection of claims 1–10, 17–19, and 22–29 as being directed to patent-ineligible subject matter under § 101.

Also for the reasons stated above, we do not sustain the Examiner’s obviousness rejections under § 103 of independent claims 1, 6, 17–19, 23, and 24 over Huber, Kenderov, Grois, and Dominowska, or of claim 22 over Huber, Kenderov, Grois, Dominowska, and official notice. We also do not sustain the obviousness rejections of claims 2, 3, and 25–29 over Huber, Kenderov, Grois, and Dominowska, or of claims 4, 5, and 7–10 over Huber, Kenderov, Grois, Dominowska, and official notice, which claims depend from claims 1, 6, 17, 19, or 24.

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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

We affirm the Examiner's decision rejecting claims 1–10, 17–19, and 22–29.

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