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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JASON A. CARTER and KEVIN G. SMITH

Appeal 2016-007341 Application 13/551,599 Technology Center 3600

Before HUBERT C. LORIN, CYNTHIA L. MURPHY, and AMEE A. SHAH, *Administrative Patent Judges*.

SHAH, Administrative Patent Judge.

DECISION ON APPEAL¹

The Appellants² appeal under 35 U.S.C. § 134(a) from the Examiner's final decision rejecting claims 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Throughout this Decision, we refer to the Appellants' Appeal Brief ("Appeal Br.," filed Nov. 10, 2015), Reply Brief ("Reply Br.," filed July 13, 2016), and Specification ("Spec.," filed July 17, 2012), and to the Examiner's Answer ("Ans.," mailed May 20, 2016), and Final Office Action ("Final Act.," mailed May 8, 2015).

² According to the Appellants, the real party in interest is Adobe Systems, Inc. Appeal Br. 2.

STATEMENT OF THE CASE

The Appellants' invention relates to "methods and systems for keyword-based traffic refinement." Spec. ¶ 4.

Claims 1, 10, and 15 are the independent claims on appeal. Claim 1 (Appeal Br. 20–21 (Claims App.)) is exemplary of the subject matter on appeal and is reproduced below (lettered bracketing added for reference).

1. A method for updating advertisement groups based on analytics data, the advertisement groups associating advertisements and keywords in a computing environment that automatically selects and displays advertisements in response to use of keywords in search engine queries, the method comprising:

performing by one or more computers:

- [(a)] receiving queries entered at one or more search engines using a keyword as a search criteria and resulting in advertisements being displayed in search results based on an advertisement group associating the displayed advertisements with the keyword;
- [(b)] receiving analytics data for each of the displayed advertisements by identifying analytics data for a network site accessed by the respective displayed advertisement being activated in the search results;
- [(c)] updating the advertisement groups based on analyzing the analytics data for the displayed advertisements by identifying advertisements that are candidates for new advertisement groups that includes [sic] a second keyword used in the keyword-based search engine marketing campaign, wherein the new advertisement group associates the identified advertisements with the second keyword such that the identified advertisements are displayed in search results for queries that use the second keyword; and
- [(d)] using the updated advertisement groups to automatically select and display advertisements in response to use of the second keyword in additional search engine queries.

REJECTIONS

Claims 1, 10, and 15 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Final Act. 2.

Claims 1–20 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. *Id.* at 3.

Claims 1–3, 5, 8, 10, 12, 15, 17, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brady (US 2009/0112690 A1, pub. Apr. 30, 2009), Chatwin et al. (US 2008/0010144 A1, pub. Jan. 10, 2008) (hereinafter "Chatwin"), and Larsen (US 2012/0185332 A1, pub. July 19, 2012). *Id.* at 5.

Claims 4, 9, 11, 14, 16, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brady, Chatwin, Larsen, and Yonezaki et al. (US 2011/0125573 A1, pub. May 26, 2011) (hereinafter "Yonezaki"). *Id.* at 9.

Claims 6, 13, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brady, Chatwin, Larsen and Li et al.

(US 2011/0196733 A1, pub. Aug. 11, 2011) (hereinafter "Li"). Id. at 10.

Claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Brady, Chatwin, Larsen, Yonezaki, and Official Notice.³ *Id.* at 11.

³ We consider the Examiner's omission of Larsen to be inadvertent error.

ANALYSIS

Written Description − § 112

The Examiner rejects independent claims 1, 10, and 15 because the Specification does not reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention including "the use of a second keyword that is used in the updating/selection of ads." Final Act. 2–3. Although the "Examiner concedes that the specification discusses instances in which poorly performing ads are paired with other keywords," the Examiner finds that "it is clear that the specification lacks written support for the concept of actually using a second keyword to update and/or select new ads." Ans. 2.

The Appellants contend that "[t]he specification provides adequate support for the feature of a 'second keyword'" (Appeal Br. 8 (emphases omitted)) and cite to the Specification at paragraphs 26, 53, 55, 58, and 62 as support for "using a second keyword to update and/or select new ads." Reply Br. 15; Appeal Br. 3, 8. Specifically, the Appellants argue that

a person of ordinary skill in the art would understand moving advertisements to a new advertisement group with new keywords in order for the advertisements to "perform better" and have improved performance metrics on the search engines, to be examples of "using the updated advertisement groups to automatically select and display advertisements in response to use of the second keyword in additional search engine queries" recited in the claim 1, similarly in claims 10 and 15.

Reply Br. 16. The Appellants do not specifically argue that the Specification provides support for the limitation of updating the advertising groups, but only argue that there is support for using the updated advertisement groups.

The Appellants' argument is not persuasive of Examiner error at least because the Appellants' argument is not commensurate with the scope of the

claims. The independent claims do not require "moving advertisements to a new advertisement group"; rather, the claims recite updating the advertisement groups by identifying advertisements that are candidates for new advertisement groups that associate the identified advertisements with the second keyword. Appeal Br. 20, 23–24, 26 (Claims App.). Further, to the extent the Appellants argue that the Specification has adequate support for updating the groups in light of the Specification's discussion(s) regarding moving the advertisements to a new group, we disagree. Nowhere in the Specification is the term "update" used, or a similar term that would equate the claimed identifying and associating of an advertisement to updating a group. The Appellants' essentially argue that, based on the Specification, it would be obvious to one of ordinary skill in the art that there is support for updating the groups. However, "[t]he question is not whether a claimed invention is an obvious variant of that which is disclosed in the specification. ... It extends only to that which is disclosed." Lockwood v. Am. Airlines, Inc., 107 F.3d 1565, 1572 (Fed. Cir. 1997); see also Rivera v. Int'l Trade Comm'n, 857 F.3d 1315, 1322 (Fed. Cir. 2017) ("The knowledge of ordinary artisans may be used to inform what is actually in the specification, see Lockwood, 107 F.3d at 1571, but not to teach limitations that are not in the specification, even if those limitations would be rendered obvious by the disclosure in the specification.").

Based on the foregoing, we sustain the Examiner's rejection of claims 1, 10, and 15 under 35 U.S.C. § 112, first paragraph.

Patent-Ineligible Subject Matter - § 101

The Appellants argue claims 1–20 as a group. *See* Appeal Br. 9, 12. We select claim 1 as representative of the group; claims 2–20 stand or fall with claim 1. *See* 37 C.F.R. 41.37(c)(1)(iv).

Under 35 U.S.C. § 101, a patent may be obtained for "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." The Supreme Court has "long held that this provision contains an important implicit exception: Laws 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 *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 588–89 (2013)).

The Supreme Court in *Alice* reiterated the two-step framework, set forth previously in *Mayo Collaborative Services v. Prometheus*Laboratories, Inc., 566 U.S. 66, 78–79 (2012), "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice*, 134 S. Ct. at 2355. The first step in that analysis is to "determine whether the claims at issue are *directed to* one of those patent-ineligible concepts." *Id.* (emphasis added) (citing *Mayo*, 566 U.S. at 79). If so, the second step is to consider the elements of the claims "individually and 'as an ordered combination" to determine whether the additional elements "transform the nature of the claim' into a patent-eligible application." *Id.* (quoting *Mayo*, 566 U.S. at 78–79).

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.* (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73). The Court acknowledged in *Mayo*, that "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Mayo*, 566 U.S. at 71. We, therefore, look to whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea, and merely invoke generic processes and machinery, i.e., "whether the focus of the claims is on [a] specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool." *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016).

Under the first step of the *Alice* framework, when reading the claims as a whole in light of the Specification, we agree with the Examiner that the claimed invention is directed to "analyzing and selecting ads based on their performance" based on organizing, storing, analyzing by mathematical correlations, and transmitting information. Final Act. 3; Ans. 3. According to the Specification, the invention relates to "[v]arious embodiments of methods and systems for keyword-based traffic refinement." Spec. ¶ 4. The Background section of the Specification discusses that a problem with prior art is the lack of "a direct method for optimizing the keywords or advertisements based on the performance of keywords of advertisements in the SEM [Search Engine Marketing] campaign" that leaves businesses unable to "effectively manage their keyword bid costs and refine the traffic to their website to ensure a high return on investment." Spec. ¶ 3. The

claimed invention addresses this problem by providing methods and systems for managing key-word based advertisement refinement. See Appeal Br. 2 (citing Spec. Fig. 6, ¶¶ 49, 50); see also Spec. ¶ 16). Claim 1 provides for a "method for updating advertising groups based on analytics data," comprising the step of a computer(s) performing the functions of receiving queries, receiving analytics data, updating advertisement data groups based on analyzing the analytics data, and selecting and displaying advertisement data based on the updated group data. See Appeal Br. 20–21 (Claims App.). The analysis of the data comprises identifying advertisements that include a keyword (id. at 20) by determining a score based on calculations of performance data of click through ratios, returns on ad spend, and/or cost per click, and comparing the data to thresholds (see Spec. ¶¶ 52–61). The computer system used to perform the functions (Spec. ¶ 69) includes any suitable processor(s) capable of executing instructions (Spec. ¶¶ 70–71), any suitable memory (id. ¶¶ 70, 73, 77), an input/output interface (id. $\P\P$ 70, 74), a network interface (id. ¶¶ 70, 75), and any input/output devices such as a keyboard, an audio device, and display(s) (id. ¶¶ 70, 76). "[T]he computer system and devices may include any combination of hardware or software that can perform the indicated functions, including computers, network devices, internet appliances, PDAs, wireless phones, pagers, etc.," i.e., a generic computer. Id. ¶ 78.

In light of Specification's description of the problem and solution, the purported advance over the prior art by the claimed invention is a way to present cost-effective advertising based on an analysis of performance data. This is the heart of the invention and the "character as a whole" of the claim. See Enfish, 822 F.3d at 1335; cf. Reply Br. 9. In that context, claim 1 is

directed to selecting and displaying advertisements based on the analysis of their performance data.⁴ The claim here is akin to ones our reviewing court has deemed abstract in Intellectual Ventures I LLC v. Capital One Bank (USA), 792 F.3d 1363, 1369–70 (Fed. Cir. 2015) (customizing and tailoring web page content based on navigation history and known user information), Elec. Power Grp. LLC v. Alstom S.A., 830 F.3d 1350, 1353-54 (Fed. Cir. 2016) (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"), and Affinity Labs of Texas, LLC v. Amazon.com Inc., 838 F.3d 1266, 1271 (Fed. Cir. 2016) (customizing a user interface to have targeted advertising based on user information). Here, the claim involves nothing more than receiving, updating, and analyzing data of a specific content, and presenting content based on the analysis, without any particular inventive technology — an abstract idea. See Elec. Power, 830 F.3d at 1354. As such, we find unpersuasive the Appellants' arguments that the claim is not directed to an abstract idea because it is not directed to a formula or a "well-known economic principle" (Appeal Br. 10) and because it is "different from the examples of claims directed to abstract ideas that have been identified by the courts" (Reply Br. 7).

The Appellants ostensibly do not disagree that the claim is directed to "analyzing and selecting ads based on their performance," but argue that this

⁴ We note that "[a]n abstract idea can generally be described at different levels of abstraction." *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). The Board's "slight revision of its abstract idea analysis does not impact the patentability analysis." *Id.* at 1241.

is not an abstract idea because it does not fall into one of the "two classes of abstract ideas" given by the Supreme Court, i.e., formulas and "well-known economic principles, specifically risk hedging in *Bilski* and intermediated settlement in *Alice*." Appeal Br. 9–10 (footnotes omitted). But *Alice* did not limit the abstract idea to those two categories. Rather, the Court included methods of organizing human activities and declined to limit the "precise contours" of an abstract idea. *Alice*, 134 S. Ct. at 2356–57; *see also Elec. Power*, 830 F.3d at 1353.

Under the second step of the *Mayo/Alice* framework, we agree with and find supported the Examiner's determination that the elements of claim 1, individually or as an ordered combination, do not amount to significantly more than the above-identified abstract idea. *See* Final Act. 3–5; Ans. 7. We are not persuaded of Examiner error by the Appellants' arguments that assert the opposite. *See* Appeal Br. 11–12; Reply Br. 9–11. We note that the Specification conveys that the computer-related components recited in the claims (e.g., "computer," "processor," "memory," "search engine"), and the arrangements thereof, are routine and conventional. (*See e.g.*, Spec. ¶ 1, 69–80, Fig. 10.)

We find unpersuasive the Appellants' arguments that the claim is analogous to those of *DDR Holdings*, *LLC v. Hotels.com*, *L.P.*, 773 F.3d 1245 (Fed. Cir. 2014). Appeal Br. 11; see also Reply Br. 9–11. In *DDR Holdings*, the Federal Circuit determined that the claims addressed the problem of retaining website visitors who, if adhering to the routine, conventional functioning of Internet hyperlink protocol, would be transported instantly away from a host's website after clicking on an advertisement and activating a hyperlink. *DDR Holdings*, 773 F.3d at 1257.

The Federal Circuit, thus, held that the claims were directed to statutory subject matter because they claim a solution "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." *Id.* The court cautioned that "not all claims purporting to address Internet-centric challenges are eligible for patent." *Id.* at 1258. And the court contrasted the claims to those at issue in *Ultramercial, Inc. v. Hulu, LLC,* 772 F.3d 709 (Fed. Cir. 2014), in that, in *DDR Holdings*, the computer network was not operating in its "normal, expected manner" and the claims did not "recite an invention that is . . . merely the routine or conventional use of the Internet." *Id.* at 1258–59.

In contrast, here, according to the Appellants, the claim addresses the problem of "how to produce more relevant result content from queries to Internet search engines." Appeal Br. 11. Although the queries are networkcentric, and may produce more relevant and cost-effective content (see Spec. ¶ 3), this is not a problem rooted in technology arising out of computer networks, but rather a business problem that existed prior to the Internet and computers. Also, unlike DDR Holdings, here, the solution comprises the use of a generic computer system with a processor, memory, input/output interface, network interface, and input/output devices operating in their normal capacities to achieve the desired business-based result of producing more relevant and cost-effective advertising by receiving data, updating data based on analyzed (calculated) data, and selecting content based on the updated data. See Spec. ¶¶ 69–79, Fig. 10. The Appellants do not direct attention to, and we do not see, where the Specification describes computer components acting in an uncommon manner to further the desired solution of cost-effective advertising. Rather, the claims "recite an invention that

is . . . merely the routine or conventional use of the Internet." *DDR Holdings*, 773 F.3d at 1258–59.

In response to the Appellants' argument that "the claimed subject matter does not preempt a natural or well-known principle" (Appeal Br. 11), we note that although the Supreme Court has described "the concern that drives this exclusionary principle [i.e., the exclusion of abstract ideas from patent eligible subject matter] as one of preemption" (see Alice, 134 S. Ct. at 2354), characterizing preemption as a driving concern for patent eligibility is not the same as characterizing preemption as the sole test for patent eligibility. "The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability" and "[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis." Ariosa Diagnostics, Inc. v. Sequenom, Inc., 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice*, 134 S. Ct. at 2354). Although "preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility." Id. The claimed invention is not sufficiently limiting so as to fall clearly on the side of patent-eligibility.

The Appellants also recite the limitations of claim 1 and state that they "are not required to implement [or for] an abstract idea." Appeal Br. 12. However, the Appellants do not provide further support or reasoning as to why or how the limitations of receiving data, updating data based on analyzing analytics data, and using the updated data to select and display advertising data are not well-understood, routine, and conventional functions of a generic computer. *See Elec. Power*, 830 F.3d at 1354–55 (gathering, sending, monitoring, analyzing, selecting, and presenting information does

not transform the abstract process into a patent-eligible invention). As discussed above, the Specification provides that the computer to perform the steps of the claim comprises a generic computer system with a processor, memory, input/output interface, network interface, and input/output devices operating in their normal capacities. *See* Spec. ¶¶ 69–79, Fig. 10. There is no indication in the Specification that any technologically novel or inventive hardware is required to perform the method. *See Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1263 (Fed. Cir. 2016); *see also Enfish*, 822 F.3d. at 1336 (focusing on whether the claim is "an improvement to [the] computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity").

We also find unpersuasive the Appellants' argument that the claim is "not directed to an abstract idea because [it is] directed to an improvement to computer-related technology for optimizing search engine performance by refining the search results." Reply Br. 9; see also Appeal Br. 11. The computer technology itself is not improved. Any improvement resides in the routine tasks of updating and selecting data. "Relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible." OIP Techs., Inc. v. Amazon.com, Inc., 788 F.3d 1359, 1363 (Fed. Cir. 2015) (citing Alice, 134 S. Ct. at 2359); see also Intellectual Ventures I LLC v. Capital One Bank (USA), 792 F.3d at 1367 ("claiming the improved speed or efficiency inherent with applying the abstract idea on a computer [does not] provide a sufficient inventive concept").

In the Reply Brief, the Appellants newly argue that the Examiner, in the Final Action, "failed to articulate a *prima facie* case for rejecting the

claims under 35 U.S.C. § 101." Reply Br. 2; see also id. at 3–6. We note that this argument was not raised in the Appeal Brief, is not responsive to an argument in the Examiner's Answer, and good cause has not been shown for making this new argument. See 37 C.F.R. § 41.41(b)(2). Thus, we do not consider the argument, but do note that in rejecting the pending claims under § 101, the Examiner analyzes the claims using the Mayo/Alice two-step framework. Specifically, the Examiner looks to the language of the claims and determines that the claims are directed to the abstract idea as indicated above. See Final Act. 3. The Examiner further determines that the additional elements of the claims, taken alone and as an ordered combination, do not ensure that the claims amount to significantly more than the abstract idea. *Id.* at 3–4. Thus, the Examiner has clearly articulated the reasons for the rejection and has notified Appellants of the reasons for the rejection "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.

Based on the foregoing, we sustain the Examiner's rejection under 35 U.S.C. § 101 of claim 1, and of claims 2–20, which fall with claim 1.

We agree with the Appellants' contention that the Examiner does not adequately show that the prior art teaches updating the advertising groups based on analyzing the analytics data, as recited in limitation (c) of independent claim 1, and similarly recited in independent claims 10 and 15. *See* Appeal Br. 15–17; Reply Br. 14–15.

The Examiner relies primarily on Chatwin for teaching this limitation. Ans. 8; see also Final Act. 6 (citing Chatwin ¶¶ 56, 59–61, Table A). Specifically, the Examiner finds "Chatwin clearly discloses a method in which analytics data for one or more keywords or advertisement groups is received and analyzed." Ans. 8. The Examiner further finds that "[t]he ad groups and then updated according to the analytics data." *Id*.

However, the Examiner has not adequately shown where or how Chatwin teaches updating the advertising groups. Chatwin discloses "a method for generating target bids for one or more advertisement groups and one or more bid objects [comprising a keyword]." Chatwin ¶ 56. Analytics data for keyword or advertisement groups are received from an advertising server and used to generate a data set comprising rows identifying advertising metric values, such as clicks, views, leads, costs, and revenue, and bid-cost delta, for a given interval of time associated with keywords for advertisement groups. Id. ¶¶ 56, 58–61, Table A. Although Chatwin teaches having advertisement groups and receiving and analyzing the analytics data for the groups and keywords, the cited portions are silent as to any type of updating of the groups or data therein based on the analysis. Rather, Chatwin's analyses use the received data of and for advertisement groups to select interesting keywords, generate target bids for the interesting keywords and advertisement groups, and distribute the target bids. Chatwin ¶ 56, Fig. 2. As such, one of ordinary skill in the art would not understand that Chatwin's advertisement groups are updated based on the analysis, as required by the claims.

Based on the foregoing, we do not sustain the Examiner's rejections under 35 U.S.C. § 103(a) of independent claims 1, 10, and 15, and their dependent claims.

DECISION

The Examiner's rejection of claims 1, 10, and 15 under 35 U.S.C. § 112, first paragraph, is AFFIRMED.

The Examiner's rejection of claims 1–20 under 35 U.S.C. § 101 is AFFIRMED.

The Examiner's rejections of claims 1–20 under 35 U.S.C. § 103(a) are REVERSED.

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