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UNITED STATES PATENT AND TRADEMARK OFFICE
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BEFORE THE PATENT TRIAL AND APPEAL BOARD
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*Ex parte* JASON A. CARTER
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Appeal 2017-010666[1]
Application 13/551,600
Technology Center 3600
_____

Before CYNTHIA L. MURPHY, AMEE A. SHAH, and
MATTHEW S. MEYERS, *Administrative Patent Judges*.

MURPHY, *Administrative Patent Judge*.

DECISION ON APPEAL

The Appellant[2] appeals from the Examiner's rejections of claims 1–4
and 6–28 under 35 U.S.C. §§ 101 and 103.  We sustain the Examiner's
rejection under 35 U.S.C. § 101 (Rejection I); and we do not sustain the
Examiner's rejections under 35 U.S.C. § 103 (Rejections II–IV).

Thus, we AFFIRM.

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[1] The Appellant appeals under 35 U.S.C. § 134; we have jurisdiction over
this appeal under 35 U.S.C. § 6(b).

[2] "Adobe Systems Incorporated" is "the real party in interest for the
presently-appealed application."  (Appeal Br. 4.)

Appeal 2017-010666
Application 13/551,600

BACKGROUND

The Appellant discloses a method for "updating keywords of a keyword-based search engine marketing campaign based on analytics data." (Appeal Br. 4.)

A search engine marketing campaign works in conjunction with "Internet search engines" that offer users the capability to search "using one or more search terms, i.e., keywords." (Spec. ¶ 1.) Basically, when a user wants to initiate a search on a search engine, the user enters a query containing one or more keyword, and the search engine returns search results relating to the keyword(s). (*See id.* ¶ 2.) For example, if a user enters a query including the keyword "dog," such as "dog food" or "DOG stock quote," the search engine will return search results relating to the keyword "dog." (*See id.* ¶ 19.)

Needless to say, "entities whose advertisements appear frequently on results pages of a search engine" will "achieve enhanced levels of visibility for their businesses." (Spec. ¶ 1.) With a search engine marketing campaign, companies bid on a keyword, and the company with the highest bid on this keyword has its corresponding advertisement "appear higher in the search results in response to user searches, thus giving the business high visibility to users of the search engine." (*Id.*) And if a query-entering user selects (i.e., clicks on) this prominently displayed advertisement, he/she will be directed to the company's website, and will hopefully make a purchase therefrom. (*See id.*)

For example, suppose a company is the highest bidder on the keyword "dog." (*See* Spec. ¶ 19.) When a user enters a query for "dog food," this will match the keyword "dog," and the search engine will display the

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highest-bidding company's advertisement first in the search results. (*See id.*) If the highest-bidding company sells dog products, someone interested in "dog food" is likely to be interested in buying something from this company. (*See id.*) As such, there is a good possibility that the query-entering user will click on the company's advertisement and will purchase dog food from the company's website. Thus, when the query for "dog food" is entered by a user, the bid cost of the keyword "dog" yields "a high return on investment." (*Id.* ¶ 4.)

However, when a user enters a query for "DOG stock quote," this will also match the keyword "dog." (*See* Spec. ¶ 32.) As such, the search engine will still display the highest-bidding company's advertisement (i.e., the company selling dog products) first in the search results. Someone interested in stock-market activity will probably not be interested in buying dog products. As such, there is a very low possibility that the query-entering user will even click on the company's advertisement, much less purchase products from its website. Thus, when the query "DOG stock quote" is entered, the bid cost of the keyword "dog" does not yield "a high return on investment." (*Id.* ¶ 3.)

The Appellant's method refines a company's marketing strategy to "ensure a high return on investment" on its keyword bid costs. (Spec. ¶ 3.) In this method, analytics data is received for each query that resulted in the company's advertisement being displayed (e.g., "dog food," and "DOG stock quote") because the query contained a broad keyword (e.g., "dog"). (*See id.* ¶ 23, 32.) The received analytics data is used to score the performance of each query. (*See* Spec. ¶ 24.) For example, the query "dog

food" would get a good performance score, while the query "DOG stock quote" would not.

With the Appellant's method, a company's search engine marketing campaign is revised by making a high-performing query an "exact match keyword." (Spec. ¶ 4.) With this revision, the company's advertisement will not be displayed just because a query includes a broad keyword (e.g., "dog"), but rather will only be displayed when a query includes more targeted keywords (e.g., "dog food"). Thus, when a user enters a disparate query (e.g., "DOG stock quote), the company's advertising efforts are not wasted on someone who is uninterested in the company's products (e.g., dog products).

As pointed out by the Appellant, a search engine marketing campaign is "particular to the Internet" because it involves Internet search engines. (Appeal Br. 20.) Nonetheless, the marketing problem addressed and solved by the Appellant's method exists in the brick-and-mortar world, and is solved in the same way.

As discussed above, a company achieves "enhanced levels of visibility" in a search engine marketing campaign when its advertisement "appear[s] frequently on results pages of a search engine." (Spec. ¶ 1.) But the same could be said of a billboard marketing campaign, as a company achieves enhanced levels of visibility when its advertisement appears frequently via multiple billboards displaying this advertisement at different locations.

Also, if the company sells dog products, analytics data will show that a billboard located in a dog-walking park performs much better than a billboard located in a financial district. And based on this analytics data, the

company would revise its billboard marketing campaign by only leasing billboards in more targeted locations. Thus, the company's advertising efforts are not wasted by leasing a billboard in the financial district.

Thus, the problem addressed by the Appellant is a company incurring costs for displaying advertisements to people uninterested in the company's products; and the Appellant's solution to this problem is displaying advertisements only to people interested in the company's products. In short, the Appellant's solution is "targeted advertising."

ILLUSTRATIVE CLAIM
*(with modified paragraphing and bracketed text added)*

1.     A method for updating keywords of a keyword-based search engine marketing campaign based on analytics data, the keyword-based search engine marketing campaign implemented in a computing environment and comprising one or more keywords that will cause a search engine to automatically display advertisements in response to search engine queries matching the one or more keywords, the method comprising:
performing by one or more computers:

[(a)] receiving, via a network, analytics data for advertisements displayed in search results displayed in response to search engine queries that match a broad match keyword included in the search engine marketing campaign, the analytics data identifying (i) performance data for each of the advertisements displayed in the search results to users of the search engine, the performance data comprising one or more of: a number of impressions, a number of clicks, revenue attributed, and cost attributed, and (ii) the search engine queries resulting in the respective search results from which the respective advertisements were displayed;

[(b)] using the analytics data to score a first search engine query as a candidate exact match keyword;

[(c)] determining whether the score of the first search engine query exceeds a first performance threshold;

[(d)] in response to determining that the score of the first search engine query exceeds the first performance threshold, adding the first search engine query as an exact match keyword in the keyword-based search engine marketing campaign, wherein adding the first search engine query as the exact match keyword ensures that only queries exactly matching the exact match keyword result in the corresponding advertisements displayed in search results; and

[(e)] using the updated keyword-based search engine marketing campaign to automatically determine advertisements to be displayed in response to additional search engine queries.

## REJECTIONS

I. The Examiner rejects claims 1–4 and 6–28 under 35 U.S.C. § 101 as being directed to a judicial exception without significantly more. (Final Action 2.)

II. The Examiner rejects claims 1–4, 8–12, 15–19, and 22–28 under 35 U.S.C. § 103 as being unpatentable over Armon[3] and Nayak.[4] (Final Action 5.)

III. The Examiner rejects claims 6, 13, and 20 under 35 U.S.C. § 103 as being unpatentable over Armon, Nayak, and Chatwin.[5] (Final Action 9.)

IV. The Examiner rejects claims 7, 14, and 21 under 35 U.S.C. § 103 as being unpatentable over Armon, Nayak, and Li.[6] (Final Action 10.)

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[3] Armon-Kest et al., US 2014/0372350 A1, published December 18, 2014.

[4] Nayak et al., US 2014/0358904 A1, published December 4, 2014.

[5] Chatwin et al., US 2008/0010144 A1, published January 20, 2008.

[6] Li et al., US 2011/0196733 A1, published August 11, 2011.

at 54.) The 2019 Guidance "extracts and synthesizes key concepts identified by the courts as abstract ideas," these concepts include "[c]ertain methods of organizing human activity," and, more particularly, "fundamental economic principles or practices," such as "advertising, marketing or sales activities." (*Id.* at 52.)

Step (a) of independent claim 1 recites receiving "analytics data for advertisements displayed in search results displayed in response to search engine queries that match a broad match keyword included in the search engine marketing campaign." (Appeal Br., Claims App.) This step has a counterpart in brick-and-mortar marketing, in that it consists of obtaining the information needed to evaluate the commercial effectiveness of advertisements displayed in different settings. For example, when a company has its advertisement displayed on billboards at different locations, the commercial effectiveness of each billboard would apparent from the number of people who saw this billboard (number of impressions), the number of people who visited the company's store after seeing this billboard (number of clicks), the amount of money spent during these visits (revenue attributed), and the cost for leasing this billboard (cost attributed).

Step (b) recites "using the analytics data to score a first search engine query as a candidate exact match keyword," and step (c) recites "determining whether the score of the first search engine query exceeds a first performance threshold." (Appeal Br., Claims App.) These steps have counterparts in brick-and-mortar marketing, in that analytics data about the effectiveness of advertisements displayed in different settings would of course be used to determine which settings are performing acceptably. For example, when a company has its advertisement displayed on billboards in

different locations, analytics data would be used to determine which locations are commercially effective.

Step (d) recites "in response to determining that the score of the first search engine query exceeds the first performance threshold, adding the first search engine query as an exact match keyword in the keyword-based search engine marketing campaign." (Appeal Br., Claims App.) This step has a counterpart in brick-and-mortar marketing, in that a company would eliminate advertisements displayed in low-performing settings. For example, when a company would no longer display its advertisement on billboards in non-effective locations.

Step (e) recites "using the updated keyword-based search engine marketing campaign to automatically determine advertisements to be displayed in response to additional search engine queries." (Appeal Br., Claims App.) This step has a counterpart in brick-and-mortar marketing, in that a company's advertisement would be still be displayed in high-performance settings. For example, a company would still display its advertisement on billboards in commercially-effective locations.

As demonstrated above, independent claim 1 recites targeted-advertising steps to ensure that a company's advertisement is displayed only in settings that reach people interested in buying the company's product. Targeted advertising is a fundamental economic practice, which is a method of organizing human activity, and therefore an abstract idea.

Thus, under Prong One of Step 2A, independent claim 1 recites an abstract idea, and we proceed to the second prong of Step 2A (Prong Two).

In Prong Two, we evaluate whether the claim contains additional elements that "integrate" the abstract idea "into a practical application."

(2019 Guidance, at 54.) "Additional elements" are "claim features, limitations, and/or steps that are recited in the claim beyond the identified judicial exception." (*Id.* at 55 n.24) As such, an "additional element" in independent claim 1 would have to be a limitation/feature that is unrelated to the targeted-advertising strategy set forth in steps (a)–(e).

The additional elements in independent claim 1 consist of the targeted-advertising steps being "perform[ed] by one or more computers," data being received "via a network," and perhaps determining "automatically" advertisements to be displayed. (Appeal Br., Claims App.) This amounts to independent claim 1 simply requiring a computer to "apply" the targeted-advertising strategy set forth in steps (a)–(e). (*See* 2019 Guidance, at 55.) This is not enough to integrate this abstract idea into a practical application. (*See id.*)

Thus, under Prong Two of Step 2A, additional elements in independent claim 1 do not integrate the recited mental process into a practical application, and we proceed to Step 2B.

In Step 2B, we evaluate whether claim 1's additional elements "simply append[] well-understood, routine, conventional activities previously known in the industry, specified at a high level of generality, to the judicial exception." (2019 Guidance, at 56.) Here, the Specification describes the computer(s), the network, their functions, and their arrangement relative to each other, as well understood, conventional, and routine. (*See e.g.*, Spec. ¶¶ 69–73, Fig. 10.) As for "automatically" determining advertisements to be displayed, this described and depicted as a block in a flowchart diagram. (*See id.* ¶ 35, Fig. 3.)

Thus, we agree with the Examiner that independent claim 1 fails the *Alice* test for patent eligibility.

The Appellant argues that, like the claims under review in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016), the claimed method sets forth "improvements to a generic computer that provides ***faster searching of data*** than would be possible with existing solutions." (Reply Br. 9; *see also* Appeal Br. 19.) But the Appellant does not explain, and we do not see, how the claimed method increases the speed at which a search engine searches. Although the Appellant asserts that the claimed steps are for "optimizing search engine performance," it is not the search engine that is being improved or optimized. (Appeal Br. 19.) Rather, the advertising impact of the searches returned by the search engine is optimized due to an adjustment in a targeted-advertising strategy. Insofar as this is an improvement, it is an improvement in a fundamental economic practice, not an improvement in computer technology.

The Appellant argues that, like the claims under review in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), independent claim 1 addresses "a technological problem particular to the Internet, namely causing Internet search engines to return more relevant search result content (including advertisements) in response to queries entered by users of the search engines." (Appeal Br. 20.) But, the problem addressed by the Appellant has nothing to do with the performance of a search engine, and the purported problem is solved by adjusting keywords to sharpen a targeted-advertising strategy. The adjustment of keywords, based on target-advertising objectives is not rooted in computing technology, as the search engines work in the same (i.e., normal and expected) way when

they return sponsored content in response to queries containing the adjusted keywords.

Thus, we sustain the Examiner's rejection of independent claim 1 under 35 U.S.C. § 101. Claims 1–4 and 6–28 are argued as a group for this rejection, and so claims 2–4 and 6–28 fall with independent claim 1.[8]

*Rejections II – IV- 35 U.S.C. § 103*

The Examiner determines that the method/system/instructions set forth in independent claims 1, 11, and 18 would have been obvious over the combined teachings of Armon and Nayak. (*See* Final Action 5.)

Independent claims 1, 11, and 18 require "analytics data for advertisements displayed in search results displayed in response to **search engine queries**" that identifies, among other things "the **search engine queries** resulting in the respective search results from which the respective advertisements were displayed." (Appeal Br., Claims App., emphasis added.) Independent claims 1, 11, and 18 also requires analytics data to be used to "score a first **search engine query**," a determination of whether "the score of the first **search engine query** exceeds a first performance threshold," and the addition of "the first **search engine query**" to the search engine marketing campaign (as an exact match keyword). (*Id.*)

Thus, independent claims 1, 11, and 18 require identifying, scoring, evaluating, and adding an individual **search engine query** (not a keyword contained in this query).

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[8] "When multiple claims subject to the same ground of rejection are argued as a group or subgroup," we may "select a single claim from the group" and decide the appeal on "the basis of the selected claim alone." (37 CFR § 41.37(c)(1)(iv).)

The Examiner explains that Armon discloses a method in which **keywords** are "monitored," "'scored,'" and "applied" to a marketing campaign; and that Nayak discloses "scor[ing] search-engine **keywords**, and "update[ing]" a marketing campaign "according to the **keyword** scores." (Answer 11; *see also* Armon ¶¶ 58, 65; Nayak ¶¶ 55–66.)  This establishes that the prior art discloses identifying, scoring, and adding **keywords**. However, as indicated above, independent claim 1 requires identifying, scoring, and adding individual **search engine queries**, not keywords contained in these queries.  As such, the prior art does not show or suggest the Appellant's claimed improvement to the fundamental economic practice of targeted advertising.

We are persuaded, therefore, by the Appellant's arguments that the Examiner has not sufficiently established that prior art shows or suggests the method/system/instructions set forth in independent claims 1, 11, and 18. (*See* Appeal Br. 21–26; *see also* Reply Br. 11–14.)  And the Examiner's further findings and determinations with respect to the dependent claims do not compensate for the shortcomings in the rejection of the independent claims.  (*See* Final Action 7–11.)

Thus, we do not sustain the Examiner's rejection of claims 1–4, 8–12, 15–18, and 22–28 under 35 U.S.C. § 103 as being unpatentable over Armon and Nayak; we do not sustain the Examiner's rejection of claims 6, 13, and 20 under 35 U.S.C. § 103 as being unpatentable over Armon, Nayak, and Chatwin; and we do not sustain the Examiner's rejection of claims 7, 14, and 21 under 35 U.S.C. § 103 as being unpatentable over Armon, Nayak, and Li.

DECISION

We AFFIRM the Examiner's rejection of claims 1–4 and 6–28 under 35 U.S.C. § 101.

We REVERSE the Examiner's rejections of claims 1–4 and 6–28 under 35 U.S.C. § 103.

<u>AFFIRMED</u>