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EXAMINER

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PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DEBORAH L. DEAN
and IAN RUSHTON

Appeal 2016-003066¹
Application 12/955,250²
Technology Center 3600

Before ANTON W. FETTING, BIBHU R. MOHANTY, and
MATTHEW S. MEYERS, *Administrative Patent Judges*.

MEYERS, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's
Final Rejection of claims 1–19. We have jurisdiction under 35 U.S.C.
§ 6(b).

We AFFIRM.

¹ Our Decision references Appellants' Appeal Brief ("Appeal Br.," filed July 7, 2015) and Reply Brief ("Reply Br.," filed January 31, 2016), the Examiner's Answer ("Ans.," mailed December 3, 2015), and Final Office Action ("Final Act.," mailed December 27, 2013).

² Appellants identify Alere Health LLC as the real party in interest (Appeal Br. 3).

CLAIMED INVENTION

Appellants' claims relate "generally to the field of disease management and wellness programs, and more particularly to a system and method for contact management in the delivery of healthcare related services whereby interaction with plan participants is optimized" (Spec. ¶ 2).

Claims 1, 8, and 14 are the independent claims on appeal. Claim 8 reproduced below, with added bracketed notations, is illustrative of the subject matter on appeal:

8. A method of optimizing contacts with a plan participant embodied in a computer program product for execution on an instruction processing system, comprising a tangible storage medium readable by the instruction processing system and storing instructions for execution by the instruction processing system for performing the method comprising:

[a] making an initial contact attempt with the plan participant via a first communications means;

[b] determining an effectiveness of the first communication means; and

[c] making a subsequent contact attempt with the plan participant via a second communication means, the second communications means selected based on the determination of effectiveness of the first communication means, wherein the effectiveness of the contact attempt is determined from statistical aggregates.

REJECTIONS

Claims 1–19 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.³

³ The Examiner entered this as a new ground of rejection (*see* Ans. 7–9).

Claims 1, 2, 4–9, 11–15, and 17–19 are rejected under 35 U.S.C. § 103(a) as obvious over Kelley-Hrabe (US 2008/0082351 A1, pub. Apr. 3, 2008) and Sommerer (US 2004/0158613 A1, pub. Aug. 12, 2004).

Claims 3, 10, and 16 are rejected under 35 U.S.C. § 103(a) as obvious over Kelley-Hrabe, Sommerer, and Dicks (US 2008/0097793 A1, pub. Apr. 24, 2008).

ANALYSIS

Non-statutory subject matter

Appellants argue claims 1–19 as a group (*see* Reply Br. 2–7). We select independent claim 1 as representative. Claims 2–19 stand or fall with independent 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.*, 133 S. Ct. 2107, 2116 (2013)). The Court has, thus, made clear that “[p]henomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.” *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (emphasis added).

Following the Supreme Court, the Federal Circuit has similarly held that mental processes are not patent-eligible subject matter. Therefore, the court has held that methods which can be performed entirely in the human

mind are unpatentable not because “there is anything wrong with claiming mental method steps as part of a process containing non-mental steps,” but rather because “methods which can be performed *entirely* in the human mind are the types of methods that embody the ‘basic tools of scientific and technological work’ that are free to all men and reserved exclusively to none.” *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011) (citation omitted).

The Supreme Court in *Alice* reiterated the two-step framework, set forth previously in *Mayo Collaborative Services v. Prometheus Labs., Inc.*, 566 U.S. 66 (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.* 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.* (citing *Mayo*, 566 U.S. at 79, 78). 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) (citing *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.

Here, in rejecting claims 1–19 under 35 U.S.C. § 101, the Examiner finds the claims are directed towards the abstract idea of “optimizing the mode of contact with a medical plan participant by determining the effectiveness of a communication means through the collection of statistical data correlating the effectiveness of mode of contact” (Ans. 8 (emphasis omitted)). The Examiner further finds

[o]ptimizing the mode of contact with a plan participant as described by the claimed invention is an abstract idea because it compares new and stored information and uses rules to identify options and organizes information through mathematical correlations which have been found by the courts to be abstract ideas. Rules are applied to the data regarding the effectiveness of the contact mode to determine whether the patient profile should be modified. Mathematical correlations in the form of statistical analysis are applied to the data to determine the effectiveness of the mode of contact. Furthermore analyzing the effectiveness of a mode of contact is a mental process of managing behavior that could be performed in the human mind or by a human using a pen and paper.

(*Id.* at 8–9 (emphasis omitted)).

In response, Appellants argue that the Examiner’s rejection is not proper because the Examiner “does not explain what is meant by this recitation of an abstract idea” (Reply Br. 2), and further argues that “the claims are directed to significantly more than any abstract idea” (*id.*). Appellants’ arguments are not persuasive.

According to the Specification, “The present invention relates generally to the field of disease management and wellness programs, and more particularly to a system and method for contact management in the

delivery of healthcare related services whereby interaction with plan participants is optimized” (Spec. ¶ 2). The Specification identifies that “[a]s additional communication channels are developed, individuals generally receive more and more contact requests and have more and more sources of information competing for their attention” (*id.* ¶ 5). The Specification observes that “it can be increasingly difficult to effectively maintain the desirable degree of contact and information exchange” (*id.* ¶ 7). To address this challenge, the Specification discloses “that needs exist for improved systems and methods of managing contacts between disease management and wellness program providers and participants” (*id.*). And, independent claim 1 is directed to “[a] system for optimizing the mode of contact with a medical plan participant” comprising instructions for “storing . . . participant profile” information, “receiving data regarding the effectiveness of a contact attempt with the medical plan participant,” and “modifying the . . . participant profile based on” the received data which includes “statistical aggregates.”

Under step one of the framework set forth in *Alice*, we agree with the Examiner that the invention is broadly directed to the concept of optimizing the effectiveness of a mode of contact using statistical analysis (*see* Ans. 8–9). In this regard, we find the steps recited in independent claim 1 involve nothing more than storing, receiving, and analyzing data, all steps that can be performed manually. *See also CyberSource*, 654 F.3d at 1373 (a method can be performed by human thought alone, or by a human using pen and paper, it is merely an abstract idea and is not patent-eligible under § 101).

We also find, the claims are similar to the claims that our reviewing courts have found patent ineligible in *Electric 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”), *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1333 (Fed. Cir. 2015) (using organizational and product group hierarchies to determine a price), *cert. denied*, 136 S. Ct. 2510 (2016), and *Parker v. Flook*, 437 U.S. 584 (1978) (mathematical algorithm used for adjusting an alarm limit).

Here, independent claim 1 involves nothing more than receiving a profile, receiving data regarding the effectiveness of a contact attempt, and modifying the profile based on the received data, without any particular inventive technology – an abstract idea. *See Elec. Power Grp.*, 830 F.3d at 1353–54 (when “the focus of the asserted claims” is “on collecting information, analyzing it, and displaying certain results of the collection and analysis,” the claims are directed to an abstract idea). *See also Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344–45 (Fed. Cir. 2013) (claims reciting “generalized software components arranged to implement an abstract concept [of generating insurance-policy-related tasks based on rules to be completed upon the occurrence of an event] on a computer” not patent eligible).

Step two is “a 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.’” *Alice*, 134 S. Ct. at 2355 (alteration in original) (citing *Mayo*, 566 U.S. at 72–73).

And, similar to the situation in *Electric Power*, we find nothing sufficient to remove the claims from the class of subject matter ineligible for patenting. As the court explained in *Electric Power*, “merely selecting information, by content or source, for collection, analysis, and display does nothing significant to differentiate a process from ordinary mental processes, whose implicit exclusion from § 101 undergirds the information-based category of abstract ideas.” *Elec. Power Grp.*, 830 F.3d at 1355.

Here, Appellants argue that independent claim 1 amounts to significantly more than the abstract idea because it includes “a computer-readable memory means for storing,” “input means for receiving data,” and “processing means for modifying . . . the data” (Reply Br. 4). However, we agree with the Examiner that independent claim 1 merely requires a generic computer to “perform generic computer functions that serve to merely link the abstract idea to a particular technological environment” (Ans. 9) — none of which add inventiveness because they merely require the application of conventional, well-known analytical steps. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014) (“[T]he claimed sequence of steps comprises only ‘conventional steps, specified at a high level of generality,’ which is insufficient to supply an ‘inventive concept.’” (citing *Alice*, 134 S. Ct. at 2357)). There is no indication in the record that any specialized computer hardware or other “inventive” computer components are required. In fact, the Specification explicitly discloses that it utilizes a server 11 which “includes, but is not limited to, PCs, workstations, laptops, PDAs, palm devices and the like” (*see* Spec. ¶ 34; *see also id.* ¶¶ 30–44). Thus, each limitation does no more than require a generic computer to perform generic computer functions.

And, considered as an ordered combination, the computer components of Appellants' independent claim 1 add nothing that is not already present when the limitations are considered separately. Viewed as a whole, Appellants' claims simply recite the concept of optimizing the effectiveness of a mode of contact using statistical analysis. The claims do not, for example, purport to improve the functioning of the computer itself. Nor do they effect an improvement in any other technology or technical field. Instead, the claims at issue amount to nothing significantly more than an instruction to apply the abstract idea of optimizing the effectiveness of a mode of contact using statistical analysis. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2360.

Appellants also address separately dependent claims 2–7 (*see* Reply Br. 4–6). As we find, however, that dependent claims 2–7 merely describe further characteristics of the underlying concept and lack additional elements that would render the claims patent-eligible, we also sustain the rejection under § 101 of these dependent claims on the same basis as the independent claims from which they depend. In particular, dependent claims 2–4 merely identify various types of communication channels, and claims 5–7 recite what essentially amount to the various forms of data regarding effectiveness, which we discern sits squarely within, and does not alter appreciably, the broader concept of “optimizing the effectiveness of a mode of contact using statistical analysis.”

In view of the foregoing, we sustain the Examiner's rejection under 35 U.S.C. § 101 of independent claim 1 and its dependent claims 2–7, and claims 8–19, which fall with independent claim 1.

Obviousness

Appellants argue claims 1–19 as a group (*see* Appeal Br. 11–15; *see also* Reply Br. 7–11). We select independent claim 8 as representative. Claims 1–7 and 9–19 stand or fall with independent claim 8. *See* 37 C.F.R. § 41.37(c)(1)(iv).

We are not persuaded by Appellants’ argument that the Examiner erred in rejecting independent claim 8 under 35 U.S.C. § 103(a) because the combination of Kelley-Hrabe and Sommerer fails to disclose or suggest “the effectiveness of the contact attempt is determined from statistical aggregates,” as recited by limitation [c] of independent claim 8 (*see* Appeal Br. 11–15; *see also* Reply Br. 7–11).

Instead, we agree with, and adopt the Examiner’s findings and rationales, as set forth at pages 2–3 and 7 of the Final Office Action and pages 10–11 of the Answer (*see* Final Act. 2–3, 7 (citing Kelley-Hrabe ¶¶ 3–8, 56; Sommerer ¶¶ 14, 18, 23, 29–32, 39, and 42); *see also* Ans. 10–11). We add the following discussion for emphasis.

Kelley-Hrabe is directed to a system

for providing customized messages relating to one or more health plan members [and] may include compiling member data to identify one or more outcomes related to the member data; risk-stratifying the one or more outcomes; providing customized messages based on at least one of the risk-stratified outcomes; configuring the customized messages based on the member’s plan benefits; and providing customized messages to one or more health plan members or healthcare personnel.

(Kelley-Hrabe ¶ 5; *see also id.* ¶ 63). Kelley-Hrabe discloses “in addition to providing benefit information and claim data, it is desirable to provide additional types of information to the members with the goal of more

actively engaging the members in their healthcare management” (*id.* ¶ 3).

Kelley-Hrabe discloses that “customized messages may be configured using a member’s communication preferences” (*id.* ¶ 56). In this regard,

Kelley-Hrabe discloses

customized messages may be configured based on consumer modeling and segmentation information in which a member's life stage, e.g., socioeconomic background and demographics, utilization and healthcare consumption information are taken into account. In addition, a member’s previous response history to customized messages and their personality, e.g., determined by phone call analysis or other member encounters, may be used to configure customized messages.

(*Id.*). Kelley-Hrabe further discloses “messages that may be relevant to a member may be delivered via multiple communication channels, including via mail, email, a web portal, and over the phone” (*id.* ¶ 68). Kelley-Hrabe also discloses that its

customized messages may be tracked for each member. Accordingly, in some configurations, the results of providing customized messages may be measured based on member behavior trends. In response, customized messages may be modified in order to achieve desired results. For example, customized messages may be modified in order to compensate for member behavior or market influences.

(*Id.* ¶ 69).

Sommerer is directed to a system for “automat[ing] the task of maintaining an up to date electronic contact address book” (Sommerer ¶ 8).

Sommerer discloses that upon initiating its method,

a message is transmitted to each individual within the contact list requesting updated contact information. Typically, the message includes current contact information for the recipient in order to allow the recipient to indicate that no change has occurred. There are a number of possible outcomes to the step of transmission

detailed above resulting in contacts classified into three groupings; valid contacts, suspect contacts and invalid contacts
.....

(*Id.* ¶ 12; *see also id.* ¶¶ 29–32). In the second outcome disclosed by Sommerer,

the transmission is not responded to after several contact attempts and the transmission does not appear to fail, in which case it is assumed that the contact information is correct. After a predetermined number of communications with no response the contact is noted as being suspect and therefore a follow up using another method of communication is required.

(*Id.* ¶ 14; *see also id.* ¶¶ 30–31).

Appellants argue that the Examiner erred in rejecting independent claim 8 because the Examiner’s interpretation of the phrase “statistical aggregates” is “neither reasonable nor consistent with the specification” (Appeal Br. 12; Reply Br. 7–8). More particularly, Appellants argue that the Examiner “completely ignores the claim term ‘aggregates’ in concluding that a predetermined number of communication reads on the claim term ‘statistical aggregates’” (Appeal Br. 12; *see also* Reply Br. 8).

To support their position, Appellants assert that it was known in the art at the time of the filing that “[s]tatistical aggregation partitions the entire data set into smaller subsets, compresses each subset into certain low-dimensional summary statistics and aggregates the summary statistics to approximate the desired computation based on the entire data” (Appeal Br. 12 (citing App’x. D, Xi Ruibin, “Statistical Aggregation: Theory and Applications” (2009). *All Theses and Dissertations (ETDs)*, Paper 388, Abstract)). Appellants further rely on Wikipedia to support their position, and conclude that “‘statistical aggregates’ are summary statistics derived from data or observations” (Appeal Br. 12–13). Appellants also point to

their Specification, at paragraph 75,⁴ to support their position (*see* Appeal Br. 13–14; *see also* Reply Br. 8–9). We are not persuaded by Appellants’ argument.

During examination, “claims . . . are to be given their broadest reasonable interpretation consistent with the specification, and . . . claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art.” *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (internal quotation and citations omitted). However, limitations appearing in the specification, but not recited in the claim, will not be read into the claim. *See CollegeNet, Inc. v. ApplyYourself, Inc.*, 418 F.3d 1225, 1231 (Fed. Cir. 2005) (although the specification can be examined for proper context of a claim term, limitations from the specification will not be imported into the claims).

Here, as the Examiner correctly finds, the phrase “statistical aggregates” is not defined by the Specification (Ans. 11). Thus, in the absence of any special definition in the Specification for the phrase “statistical aggregates,” we agree with the Examiner that “[i]n order to determine if a number of communications has reached a ‘predetermined number’ of communications the server must sum or aggregate the number non-responses” (Ans. 10 (emphasis omitted)), in light of Sommerer’s disclosure regarding “following up with another method of communication after a ‘predetermined number’ of communications with no response” (*see id.* at 10–11 (citing Sommerer ¶¶ 14, 29–32)), is within the scope of “the effectiveness of the contact attempt is determined from statistical

⁴ Appellants mistakenly refer to paragraph 77 in their briefs (*see* Appeal Br. 13; *see also* Reply Br. 9).

aggregates,” and thus, within the meaning of independent claim 8, under a broad, but reasonable, interpretation. That is, we agree with the Examiner that “Sommerer teaches the effectiveness of the communication mode is determined from a summation of non-responses or ‘statistical aggregates’” (Ans. 10–11), and as such, discloses the argued limitation.

Although Appellants contend that the Specification describes that “the effectiveness of a particular type of contact on a particular type of participant is determined by aggregating ‘statistical data correlating the effectiveness of various contact modalities with one or more participant characteristics’” (Appeal Br. 13 (citing Spec. ¶ 75); *see also* Reply Br. 8–9), we agree with the Examiner that Appellants are relying on “a preferred embodiment rather than making a statement with a clear lexicographic definition” (Ans. 11). We also note that the term “statistical aggregates” as it appears in independent 8, is broader than Appellants’ suggested interpretation, by virtue of the doctrine of claim interpretation, given that dependent claim 13 recites that “statistical aggregates further comprise[] participant characteristics wherein the participant characteristics is selected from the group consisting of age, gender, geographic location, education level, job title, income level, marital status, medical conditions.” *See Karlin Tech. Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 971–972 (Fed. Cir. 1999) (The doctrine of claim differentiation is “based on the common sense notion that different words or phrases used in separate claims are presumed to indicate that the claims have different meanings and scope.”). Thus, we are not persuaded by Appellants’ argument that the Examiner’s interpretation of “statistical aggregates” is either unreasonable or inconsistent with the Specification.

Appeal 2016-003066
Application 12/955,250

In view of the foregoing, we sustain the Examiner's rejection under 35 U.S.C. § 103(a) of independent claim 8, and claims 1–7 and 9–19, which fall with independent claim 8.

DECISION

The Examiner's rejection of claims 1–19 under 35 U.S.C. § 101 is affirmed.

The Examiner rejections of claims 1–19 under 35 U.S.C. § 103(a) are sustained.

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