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POLSINELLI PC
1401 Eye Street N.W., Suite 800
WASHINGTON, DC 20005

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PETER GRINDROD

Appeal 2016-004853
Application 13/215,047
Technology Center 3600

Before BIBHU R. MOHANTY, NINA L. MEDLOCK, and AMEE A. SHAH, *Administrative Patent Judges*.

SHAH, *Administrative Patent Judge*.

DECISION ON APPEAL[1]

The Appellant[2] appeals under 35 U.S.C. § 134(a) from the Examiner's final decision rejecting claim 1, which is the only claim pending. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE and ENTER a NEW GROUND OF REJECTION pursuant to our authority under 37 C.F.R. § 41.50(b).

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[1] Throughout this opinion, we refer to the Appellant's Appeal Brief ("Appeal Br.," filed Oct. 10, 2012), Reply Brief ("Reply Br.," filed Jan. 14, 2013), and Specification ("Spec.," filed Aug. 22, 2011), and to the Examiner's Answer ("Ans.," mailed Nov. 14, 2012) and Final Office Action ("Final Act.," mailed May 10, 2012).

[2] According to the Appellant, the real party in interest is Cignifi, Inc. Appeal Br. 3.

STATEMENT OF THE CASE

The Appellant's invention "relates to inferring user characteristics from mobile phone usage" and, more particularly, to "inferring creditworthiness from mobile phone usage." Spec. ¶ 2.

Claim 1 is the only claim on appeal and is reproduced below (with added bracketing for reference):

> 1. A computer implemented method for inferring creditworthiness of a mobile phone user, the method comprising:
>
> [(a)] receiving, by a computer, call level data for each of a first plurality of mobile phone users, with the call level data being for a period of common duration;
>
> [(b)] deriving, by the computer, attributes from the received call level data;
>
> [(c)] defining, by the computer, an attribute space based on the derived attributes with each mobile phone user being represented by an attribute vector;
>
> [(d)] partitioning, by the computer, the attribute space into clusters of attribute vectors;
>
> [(e)] receiving, by the computer, a measure of creditworthiness for each of a second plurality of mobile phone users with the second plurality of mobile phone users being a subset of the first plurality of mobile phone users;
>
> [(f)] mapping, by the computer, each received measure of creditworthiness to at least one cluster corresponding to the mobile phone user from the subset;
>
> [(g)] characterizing, by the computer, the creditworthiness of each cluster as a function of the creditworthiness mapped thereto; and
>
> [(h)] inferring, by the computer, the creditworthiness of a given mobile phone user in a given cluster as a function of the creditworthiness characterizing the given cluster.

Appeal Br. 24 (Claims App.).

REJECTIONS

Claim 1 stands rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement. Final Act. 4.

Claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Haggerty (US 2006/0242048 A1, pub. Oct. 26, 2006) and Johnson (US 2008/0310608 A1, pub. Dec. 18, 2008). *Id.* at 5.

ANALYSIS

§ 112 – Indefiniteness

The Examiner rejects claim 1 because the Specification does not describe the steps performed "by the computer" in such a way as to 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 being performed by a computer. Final Act. 4. The Examiner finds that "the written description does not disclose which steps are particularly performed by a computer and as such, Applicant's amendment presents subject matter which was not described in the specification." *Id.*

Conversely, the Appellant contends that "[o]ne of ordinary skill in the art, at the time the application was filed, would certainly recognize that the inventors had possession of the claimed invention." Appeal Br. 6. The Appellant cites to the original claims and the Specification, paragraphs 24, 56, and 57, as support for "defin[ing] that the technology can be a computer program product that is acted upon by a computer" such that one of ordinary skill would recognize the Appellant had possession of the claimed computer-implemented method at the time of filing. *Id.* at 6–7. We agree.

The Specification describes throughout that "technology" can be used to perform such functions as receiving, calculating, determining, estimating, and summarizing data, deriving attributes and risk measures, partitioning space, and inferring creditworthiness. *See* Spec. ¶¶ 12, 13, 16, 19, 20, 23, and 24. The Specification further describes that the "technology" can take the form of "hardware, software or both hardware and software elements" (*id.* ¶ 56), or "a computer program product comprising program modules accessible from computer-usable or computer-readable medium storing program code for use by or in connection with one or more computers, processors, or instruction execution system" (*id.* ¶ 57). Figure 7 of the Specification depicts a data processing system with a processor, memory elements, input/output devices, and network adapters. *See also id.* ¶ 58. Thus, we conclude the Specification reasonably conveys to one of ordinary skill in the art that the Appellant had possession of the steps being performed by a computer at the time the application was filed.

Therefore, we do not sustain the Examiner's rejection of claim 1 under 35 U.S.C. § 112, first paragraph.

§ 103 – Obviousness

The Appellant contends that the Examiner's rejection of claim 1 is in error because, in pertinent part, the prior art does not teach limitation (e) of receiving a measure of creditworthiness for each of a second plurality of users as a subset of a first plurality of users. *See* Appeal Br. 16–17, 22. We agree.

The Examiner finds that "*Haggerty* discloses a method of modeling that uses various data sources to provide outputs that describe consumer

spending capability" and that Johnson teaches that the "particular type of data [claimed] is old and well known to be collected in the art." Ans. 17. The Examiner cites to Haggerty for teaching the "functional steps" of claim 1 of receiving, deriving, defining, portioning, mapping, characterizing, and inferring data, and to Johnson for teaching "the type of data and to whom the data pertains." *Id.* at 21. With regards to limitation (e), the Examiner finds that Haggerty teaches receiving data, including specific types of customers, to identify and evaluate the ability of a customer to pay for services. *See id.* at 35–36; *see also* Final Act. 8, 11. The Examiner further finds that Haggerty teaches receiving a measure, i.e., a qualitative or quantitative indication or tendency, of the customer's ability to pay, i.e., creditworthiness. Ans. 41–42. The Examiner finds that Johnson teaches that that the data pertain to a "*second plurality of mobile phone users with the second plurality of mobile phone users*." Final Act. 11.

Even assuming *arguendo* the Examiner's findings to be correct, the Examiner has not adequately shown, such that one or ordinary skill in the art would understand, that Haggerty and Johnson, alone or in combination, teach receiving data for a subset of a first set of data, as required by limitation (e). To the extent the Examiner considers Haggerty's consumers as the first data set and the consumers in sub-categories, i.e., specific types of customers, as the subset (*see* Final Act. 8; Ans. 36 (citing Haggerty ¶ 140)), the Examiner does not adequately show where or how Haggerty teaches receiving a measure of spending ability for the subset of customers. Haggerty discloses creating a subset of consumers based on a measure and generating, deriving, validating, and refining models for the subset of consumers (Haggerty ¶¶ 46–48), but we do not see, and the Examiner has

not shown, that Haggerty discloses receiving a measure of data for the created subset. Further, although Johnson discloses receiving data for a particular user (Johnson ¶ 54), the Examiner does not adequately explain how one of ordinary skill in the art would combine Johnson with Haggerty such that Johnson teaches receiving data for a subset comprising a plurality of particular customers or for the subset of Haggerty's set of specific type of customers. *See* Appeal Br. 22.

For the above reason, we do not sustain the rejection under 35 U.S.C. § 103 of claim 1.

NEW GROUND OF REJECTION

Pursuant to our authority under 37 C.F.R. § 41.50(b), we reject claim 1 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. We find the claim ineligible for patent protection because it is directed to a non-statutory abstract idea.

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 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.* (citing *Mayo*, 566 U.S. at 79) (emphasis added). 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 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) (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 analysis, the preamble of claim 1 provides a "method for inferring creditworthiness of a mobile phone user." Appeal

Br. 24 (Claims App.). The claim achieves this by receiving, deriving, defining, partitioning, mapping, and characterizing data. *Id.* The Specification provides that the invention relates to "inferring creditworthiness from mobile phone usage." Spec. ¶ 2. In that context, the claim is directed to receiving and processing data to infer creditworthiness of a user, an idea of itself and method for organizing human activity – an abstract idea. In this manner, the claim is similar to those found to be patent-ineligible in *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324 (Fed. Cir. 2016) ("collection of information to generate a 'credit grading' and to facilitate anonymous loan shopping"); *Elec. Power Grp. LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016) (collecting, analyzing, and displaying of available information in a particular field), and *Alice*, 134 S. Ct. at 2356–57 (use of a third party to mitigate settlement risk). Here, the claim involves nothing more than generically receiving and processing data to infer data of creditworthiness, without any particular inventive technology, i.e., an abstract idea. *See Elec. Power Grp.*, 830 F.3d at 1354.

Under the second step of the analysis, we find claim 1 does not recite an inventive concept. The elements of the claim, considered alone and as an ordered combination, do not amount to significantly more to transform the abstract idea of receiving and processing data to infer creditworthiness into a patent-eligible invention. Any general purpose computer available at the time the application was filed would have been able to perform the functions of claim 1 of receiving, deriving, defining, partitioning, mapping, characterizing, and inferring data. The Specification supports this view in describing a data processing system with generic components of a processor,

memory, and input/output devices to implement the method. *See* Spec. ¶¶ 56–58, Fig, 7. The introduction of a computer to implement an abstract idea is not a patentable application of the abstract idea. *Alice*, 134 S. Ct. at 2357–58. The computer implementation here is purely conventional and performs basic functions. *See id.* at 2359–60. The claims do not purport to improve the functioning of the computer itself, nor do they effect an improvement in any other technology or technical field. *See id.* at 2359.

Thus, under the two-part analysis, we conclude that claim 1 covers claimed subject matter that is judicially-excepted from patent eligibility under § 101. Therefore, we enter a new ground of rejection of claim 1 under 35 U.S.C. § 101.

DECISION

The Examiner's rejection of claim 1 under 35 U.S.C. § 112, first paragraph, is REVERSED.

The Examiner's rejection of claim 1 under 35 U.S.C. § 103(a) is REVERSED.

A NEW GROUND OF REJECTION has been entered for claim 1 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

In addition to affirming the Examiner's rejection of one or more claims, this decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). 37 C.F.R. § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review." 37 C.F.R. § 41.50(b) also provides that Appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of

the following two options with respect to the new grounds of rejection to avoid termination of the appeal as to the rejected claims:

> (1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new Evidence relating to the claims so rejected, or both, and have the matter reconsidered by the Examiner, in which event the proceeding will be remanded to the Examiner. . . .
>
> (2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same Record. . . .

REVERSED; 37 C.F.R. § 41.50(b)