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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte THOMAS PINCKNEY, CHRISTOPHER DIXON, and
MATTHEW RYAN GATTIS

Appeal 2018-005711
Application 14/659,127¹
Technology Center 2100

Before ST. JOHN COURTENAY III, JASON J. CHUNG, and
JOYCE CRAIG, *Administrative Patent Judges*.

CRAIG, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's Non-Final Rejection of claims 1–20, which are all of the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

¹ According to Appellants, the real party in interest is eBay Inc. App. Br. 3.

INVENTION

Appellants' application relates to providing recommendations regarding different items to different users. Abstract. Claim 1 reads as follows:

1. A method, comprising:

tracking, by a computing facility, user online behavior of a plurality of users including buying behaviors, browsing behavior, social networking behavior, [and] location-based behaviors;

determining one or more inferences of user preferences based on the tracking of the online behavior;

presenting one or more questions to one or more of the users based on the one or more inferences;

receiving one or more responses to the one or more questions;

generating a ratings matrix including matrix values based on the one or more inferences and based on the one or [more] responses to the one or more questions, each row of the ratings matrix identifying one of a plurality of users, each column of the ratings matrix identifying one of a plurality of items, and each of the matrix values corresponding to a known affinity rating describing a degree of affinity associated with one of the users and one of the items, the ratings matrix including a missing entry representing an unknown affinity rating;

estimating, based on the one or more inferences and based on one or [more] responses to the one or more questions, confidence values associated with one or more of the known affinity ratings in the ratings matrix;

generating a confidence matrix that includes the confidence values;

estimating a probability that a missing affinity rating in the ratings matrix that describes an affinity associated with a specific user and a specific item corresponds to a negative affinity rating;

replacing the missing affinity rating in the ratings matrix with a predicted affinity rating that is based on the one or more inferences and based on [the] one or [more] responses to the one or more questions;

inserting a confidence value associated with the specific user and the specific item in the confidence matrix, where the confidence value has a value equal to the probability;

receiving, from the specific user, an online search inquiry that is related to the specific item;

determining, based on the ratings matrix in response to receiving the online search inquiry, a recommendation for the specific user with respect to the specific item, the recommendation being based on the predicted affinity rating and the confidence value associated with the specific user and the specific item; and

providing the recommendation to the specific user as a search result of the online search inquiry.

REJECTION

Claims 1–20 stand rejected under 35 U.S.C. § 101 because the claimed subject matter is judicially-excepted from patent eligibility under § 101. Non-Final Act. 2.

ANALYSIS

Appellants contend the Examiner erred in rejecting the pending claims as directed to patent-ineligible subject matter. *See* App Br. 8.

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.” *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014) (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66 (2012)). 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.* (citing *Mayo*, 566 U.S. at 77–78). 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*, 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.* (brackets in original) (quoting *Mayo*, 566 U.S. at 72–73). 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) (citation omitted).

Turning to the first step of the *Alice* inquiry, we agree with the Examiner that limitations of the claims are directed to the abstract idea of collecting and analyzing data, and displaying certain results of the collection and analysis, similar to *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016) and *Intellectual Ventures I LLC v. Capital One Financial Corp.*, 850 F.3d 1332 (Fed. Cir. 2017). *See* Non-Final Act. 3.

The steps of claim 1 are similar to the steps that the Federal Circuit determined were patent ineligible in *Electric Power*. In *Electric Power*, the method claims at issue were directed to “performing real-time performance monitoring of an electric power grid by collecting data from multiple data sources, analyzing the data, and displaying the results.” *Elec. Power Grp.*,

830 F.3d at 1351–52. There, the Federal Circuit held that the claims were directed to an abstract idea because “[t]he advance they purport to make is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions.” *Id.* at 1354.

Thus, we are not persuaded the Examiner erred in concluding the claims are directed to an abstract idea.

Turning to step two of the § 101 analysis, the Examiner determined the claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because they amount to no more than:

- (i) mere instructions to implement the idea on a computer, and/or
- (ii) recitation of generic computer structure that serves to perform generic computer functions that are *well-understood, routine, and conventional activities* previously known to the pertinent industry which has been treated by the courts as an attempt to link the abstract idea to a particular technological environment, *Alice Corp. Pty. Ltd. v. CLS Bank Int’l.*

Non-Final 4.

The Examiner further finds

The computing facility describes generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry which has been treated by the courts as an attempt to link the abstract idea to a particular technological environment, *Alice Corp. Pty. Ltd. v. CLS Bank Int’l.*

Non-Final 4.

In this case, after considering all claim elements, it is determined that the claims do not include additional elements that are

sufficient to amount to significantly more than the judicial exception because the additional element(s) or combination of elements in the claim(s) other than the abstract idea per se amount(s) to no more than:

- (i) mere instructions to implement the idea on a computer, and/or
- (ii) recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry which has been treated by the courts as an attempt to link the abstract idea to a particular technological environment, *Alice Corp. Pty. Ltd. v. CLS Bank Int'l.*

Non-Final 5.

In the Reply Brief, Appellants cite to an intervening authority as the basis for seeking reversal of the Examiner's rejection of claims 1–20.²

Reply Br. 5. According to the Federal Circuit, “[w]hether something is well-understood, routine, and convention[al] to a skilled artisan at the time of the patent is a factual determination.” *See Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018) at 1369. Reply Br. 5 (emphasis added).

Appellants' new arguments citing *Berkheimer* (881 F.3d at 1369) as an intervening authority (Reply Br. 5) are permitted under our procedural rule, 37 C.F.R. § 41.52(a)(2) (“Appellant may present a new argument based upon a recent relevant decision of either the Board or a Federal Court.”).

The USPTO *Berkheimer* Memorandum requires a Patent Examiner to support with factual evidence any allegation that claim elements (or a combination of elements) were well-understood, routine, or conventional, at

² We note Appellants' Appeal Brief was filed on December 14, 2017. In reviewing the record, we recognize that Appellants had no opportunity to argue *Berkheimer* until after it was decided by the Federal Circuit on February 8, 2018. Thus, Appellants' first opportunity to argue *Berkheimer* as an intervening authority was in the Reply Brief, filed on May 14, 2018.

the time the invention was filed. Four specific types of acceptable factual evidence are enumerated in the Memorandum. Appellants contend:

In the recent case of *Berkheimer v. HP, Inc.*, No. 2017-1437, *slip op.*, (Fed. Cir. Feb. 8, 2018), the Federal Circuit held that a determination of patent eligibility “may contain underlying factual issues.” *Id slip op.* at 12. The Court further stated that “the Supreme Court recognized that in making the § 101 determination, the inquiry ‘might sometimes overlap’ with other fact-intensive inquiries like novelty under § 102.” *Id* (internal citations omitted). Additionally, to clarify the impact of such a holding, the Office published a memorandum to assist examiners in applying the holding of *Berkheimer*. See, e.g., *Memorandum - Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (Berkheimer v. HP, Inc.)*, April 19, 2018 (hereinafter “Berkheimer Memo”). In particular, the Berkheimer Memo points out that a combination of elements is found to be well-understood, conventional, or routine, only if an examiner expressly finds 1) a citation to an express statement in the specification, 2) a citation to a court decision noting the well-understood, routine, conventional nature of the combination of elements, 3) a citation to a publication that demonstrates the well-understood, routine, conventional nature of the combination of elements, or 4) a statement of official notice of the well-understood, routine, conventional nature of the combination. *Id* at pp. 3-4.

Reply Br. 5–6. Appellants argue the Examiner failed to provide sufficient evidence that the additional elements are routine, conventional, or well-understood, as *Berkheimer* requires.

We agree with Appellants that the Examiner erred by not making at least one of the four types of factual findings required by *Berkheimer*.

Accordingly, on the record before us, for essentially the reasons articulated by Appellants in the Reply Brief (5–6), we do not sustain the

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Examiner's rejection of claims 1–20 under 35 U.S.C. § 101, as directed to patent-ineligible subject matter.

DECISION

We reverse the decision of the Examiner rejecting claims 1–20 under 35 U.S.C. § 101.

REVERSED