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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte BRIAN SCOTT JOHNSON, MICHAEL CHING,
JULIE LAVÉE NETZLOFF, and VAMSI KRISHNA SALAKA

Appeal 2018-005266
Application 14/193,219
Technology Center 3600

Before CAROLYN D. THOMAS, PHILLIP A. BENNETT, and
SCOTT RAEVSKY, *Administrative Patent Judges*.

THOMAS, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner’s decision to reject claims 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

The present invention relates generally to identifying suspicious item-related features. *See* Abstr.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as eBay Inc. Appeal Br. 2.

Independent claim 1, reproduced below, is representative of the appealed claims:

1. A computer-implemented method comprising:
 - receiving, from a client device, a query for item listings on a network site;
 - retrieving a set of item listings comprising text phrases;
 - extracting, using one or more processors, a set of text phrases from the set of item listings;
 - receiving training data comprising indications made using the set of text phrases, the indications indicating whether each item listing in the set of item listings is suspicious or not suspicious;
 - generating, by a machine having a memory and at least one processor, a model by training a classifier on the training data comprising the indications;
 - retrieving search results for the query using a search engine;
 - generating a score for each item listing in the search results by applying the generated model to each of the item listings in the search results; and
 - modifying the search results by lowering or removing items listings in the search results hav[ing] a score that exceeds a preconfigured threshold before the search results are displayed on the client device of the user.

Appellant appeals the following rejection:

Claims 1–20 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to patent-ineligible subject matter (Final Act. 7–9).

We review the appealed rejections for error based upon the issues identified by Appellant, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential).

ANALYSIS

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *E.g.*, *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with the framework, we first determine what concept the claim is “directed to.” See *Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”). For example, concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (1972)).

Recently, the USPTO published revised guidance on the application of 35 U.S.C. § 101. USPTO’s 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Revised Guidance”).

Under the Revised Guidance “Step 2A,” the office first looks to whether the claim recites:

(1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes); and

(2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)-(c), (e)-(h)). 84 Fed. Reg. at 51–52, 55.

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, does the Office then (pursuant to the Revised Guidance “Step 2B”) look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. 84 Fed. Reg. at 56.

Step 2A, Prong 1 (Does the Claim Recite a Judicial Exception?)

With respect to independent method claim 1, and similarly, system claim 14 and non-transitory machine-readable storage device claim 20, the Examiner determines that the claims are directed to “classifying a candidate item listing as suspicious” (Final Act. 7), which “is performable by a human mind, or manually using pen and paper” (*id.* at 8), which we conclude are mental processes, which is a type of abstract idea.

The Specification discloses:

E-commerce sites experience obstacles in providing relevant search

results because of certain item listings including data or other features that improperly promote the item listings for prominent inclusion in search results.

Spec. ¶ 2.

The present disclosure provides systems and methods of classifying suspicious item listings and item-related activity in e-commerce. In some embodiments, a sample of item listings is received. Each item listing in the sample of item listings may correspond to an item offered for sale on an e-commerce website. Item-related data for each item listing in the sample of item listings can be extracted. Training data comprising identifications of which item listings in the sample of item listings are suspicious and identifications of which item listings in the sample of item listings are not suspicious can be received. A model for classifying a candidate item listing on the e-commerce website as being suspicious can be determined using the training data.

Id. at ¶ 15.

Claim 1 recites at least the following limitations: (1) “receiving . . . a query for item listings,” (2) “retrieving a set of item listings comprising text phrases,” (3) “extracting . . . a set of text phrases,” (4) “receiving training data . . . indicating . . . suspicious or not suspicious,” (5) “generating . . . a model,” (6) “retrieving search results,” (7) “generating a score for each item listing,” and (8) “modifying the search results.” These limitations, under their broadest reasonable interpretation, recite mental processes because the limitations all recite acts that can be performed in the human mind or using pen and paper.

Furthermore, the claimed limitations, under their broadest reasonable interpretation, encompass acts people can perform using their minds or pen and paper because: (1) people can perform the “receiving a query” step by simply writing down desired item listings; (2) people can perform the

“retrieving” step by simply looking at item listings; (3) people can perform the “extracting” step by using a pen and paper to write down text phrases from the listings; (4) people can perform the “receiving training data” step by simply looking at the data; (5) people can perform the “generating a model” step by simply using pen and paper to note a series of steps; (6) people can perform the “retrieving search results” step by looking at the results; (7) people can perform the “generating a score” step by using pen and paper to evaluate a score; and (8) people can perform the “modifying” step by using pen and paper to delete an item from the list. *See also* Ans. 4.

Here, the Examiner also concludes that “[c]lassifying suspicious item listings is an abstract idea of itself.” Final Act. 8. Although the Examiner’s recognized category of “an idea of itself” is not one of the currently recognized categories, it is sufficient for the purposes of the present appeal that the claimed concepts reasonably can be characterized as falling within the recognized category of mental processes, which is also identified by the Examiner. *See, e.g.*, MPEP § 2106.04(a)(2)(III):

The courts have used the phrase ‘an idea ‘of itself’” to describe an idea standing alone such as an uninstigated concept, plan or scheme, as well as a mental process (thinking) that “can be performed in the human mind, or by a human using a pen and paper.” *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011).

This is true even if the claim recites that a generic computer component performs the acts. *See, e.g., Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1335 (Fed. Cir. 2015) (“Courts have examined claims that required the use of a computer and still found that the underlying,

patent-ineligible invention could be performed via pen and paper or in a person's mind."); *see also* 2019 Eligibility Guidance 84 Fed. Reg. at 52 n.14 ("If a claim, under its broadest reasonable interpretation, covers performance in the mind but for the recitation of generic computer components, then it is still in the mental processes category unless the claim cannot practically be performed in the mind."). Additionally, in *Cyberfone*, the Court held that "using categories to organize, store, and transmit information is well-established," and "the well-known concept of categorical data storage, i.e., the idea of collecting information in classified form, then separating and transmitting that information according to its classification, is an abstract idea that is not patent-eligible." *Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 Fed. App'x. 988, 992 (Fed. Cir. 2014). Here, as in *Cyberfone*, categories are used, i.e., suspicious or not suspicious, to organize, store, and transmit information.

We agree with the Examiner that the rejected claims recite an abstract idea because they are directed to processes or functions that can be performed by a human using a pen and paper.

Appellant challenges the Examiner's determinations on the ground that "the Examiner failed to establish a *prima facie* case that the claims at issue are directed to patent-ineligible subject matter." Appeal Br. 19.

Here, in rejecting claims 1–20 under 35 U.S.C. § 101, the Examiner analyzed the claims using the "July 2015 Update: Subject Matter Eligibility III (C), i.e., *Mayo/Alice* two-step framework (*see* Final Act. 8), in effect at the time the rejection was made, i.e., June 13, 2017, and we have appropriately supplemented the Examiner's analysis with the 2019 Revised Guidance. Thus, Appellant was sufficiently notified 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. Therefore, contrary to Appellant’s assertions, in doing so, the Examiner set forth a prima facie case of unpatentability such that the burden shifted to Appellant to demonstrate that the claims are patent-eligible.

Furthermore, it is plainly evident that the Examiner considered all the limitations in the claim and that the Examiner’s analysis is indeed tethered to actual claim language. *See* Final Act. 5, 8. The Examiner condensed the abstract concept to “classifying a candidate item listing as suspicious” (Final Act. 7; Ans. 3), but this is simply a higher level of abstraction. *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240-41 (Fed. Cir. 2016) (“An abstract idea can generally be described at different levels of abstraction. As the Board has done, the claimed abstract idea could be described as generating menus on a computer, or generating a second menu from a first menu and sending the second menu to another location. It could be described in other ways, including, as indicated in the specification, taking orders from restaurant customers on a computer.”)

Whichever way the Examiner described the concept, we do not see that Appellant has adequately shown that claim 1 (or any of the other claims) does not recite an abstract idea. Just because the claim includes more words than the phrase the Examiner uses as an articulation of the abstract idea to which he/she found the claim to recite is, by itself, an insufficient reason to persuasively argue that claim 1 does not recite an abstract idea. Further, the identified abstract idea need not encompass every claim limitation.

Otherwise, there would be no need for step two of the *Alice* inquiry. *See Alice*, 573 U.S. at 216.

Thus, for at least the reasons noted *supra*, we finding unavailing Appellant’s contention that “the Examiner has not articulated what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful” (Appeal Br. 21), given that the Examiner has at least equated the claims with acts performable by a human user.

Additionally, we agree with the Examiner that the dependent claims “are directed towards the same abstract idea (i.e., classifying suspicious item listings) [and] [t]here are no additional limitations found in the dependent claims that amount to significantly more than the identified abstract idea.” Final Act. 9. Here, the dependent claims contain only limitations that recite the identified abstract idea, and do not create any additional elements beyond this abstract idea. Therefore, we disagree with the argument that the Office Action fails to address the dependent claims. *See* Appeal Br. 22. Nor does Appellant explain how the elements in the dependent claims recite more than the abstract ideas. *Id.*

Therefore, for at least the aforementioned reasons, we agree with the Examiner that claim 1 recites an abstract idea, which we conclude is a “mental process.”

Step 2A—Prong 2 (integration into Practical Application)²

Under the Revised Guidance, we now must determine if additional elements in the claims integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)).

Here, we discern additional elements (or combination of elements) recited in Appellant’s representative claim 1 that integrates the judicial exception into a practical application. *See* Revised Guidance, 84 Fed. Reg. at 54–55 (“Prong 2”).

For example, Appellant contends that “the claims herein are more like *DDR Holdings* . . . because the claimed elements are particular in the way they solve the Internet related challenge . . . a search engine promoting improperly submitted listings.” Appeal Br. 29–30. We agree with Appellant.

Specifically, Appellant’s Specification states:

As previously mentioned, e-commerce sites experience obstacles in providing relevant search results because of certain item listings including data or other features that improperly promote the item listings for prominent inclusion in search results. One example of such improper promotion includes a seller attempting to list the same item for sale under multiple concurrent item listings in order to increase the chances that the seller’s item will be included in search results, as well as increase the number of times the seller’s item appears in the search results. Although the multiple listings comprise the same item for sale, the seller can attempt to distinguish their titles,

² We acknowledge that some of the considerations at Step 2A, Prong 2, properly may be evaluated under Step 2 of *Alice* (Step 2B of the Office revised guidance). For purposes of maintaining consistent treatment within the Office, we evaluate them under Step 1 of *Alice* (Step 2A of the Office revised guidance). *See* Revised Guidance, 84 Fed. Reg. at 55 n.25, 27–32.

categories, descriptions, images, sale prices, seller account information, and other attributes when creating the item listings in an attempt to fool the e-commerce website into believing that the item listings are for different items, and thus improperly flood the marketplace with multiple listings for the same item.

Spec. ¶ 50.

Another example of improper promotion includes a seller including misleading item-related data in the item listing in order to increase the item listing's seeming relevance to a search query and attractiveness to potential buyers. The seller can include popular, but inaccurate or misleading, keywords in the title or description of the item listing. For example, the seller of a smartphone could include the phrase "better than an iPhone" in the title or description of the smartphone listing, even though the seller is not selling an iPhone®, in an attempt to have the seller's item listing be included in any search results for a search query that includes "iPhone" in it.

Id. at 51. In other words, Appellant's Specification describes a particular Internet-centric problem, i.e., receiving irrelevant search results resulting from improper promotion of items through misleading data in the item listing, and a mechanism for improving the same.

Similarly, in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1259 (Fed. Cir. 2014), the subject claim was held patent-eligible because it encompassed "an inventive concept" for resolving a "particular Internet-centric problem." Like *DDR Holdings*, we determine that Appellant's computer-implemented method (claim 1) provides a solution "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." *DDR*, 773 F.3d at 1257. In particular, Appellant's claims solve the aforementioned "challenge particular to the Internet" as similarly considered by the court in *DDR*, 773 F.3d at 1256–57. Thus, we conclude Appellant's claims are like the claim held

patent-eligible by the court in *DDR*, in which the claimed invention was directed to the “challenge of retaining control over the attention of the customer in the context of the Internet,” such that:

Instead of the computer network operating in its normal, expected manner by sending the website visitor to the third-party website that appears to be connected with the clicked advertisement, the claimed system generates and directs the visitor to the above-described hybrid web page that presents product information from the third-party and visual “look and feel” elements from the host website.

Id. at 1258–59. Thus, we agree with Appellant’s arguments that “the claims herein are more like *DDR Holdings*” (App. Br. 29), given that a convincing “inventive concept” for resolving a “particular Internet-centric problem” is identified by Appellant.

For at least the reason noted *supra*, although claim 1 recites a judicial exception, i.e., a mental process, claim 1 integrates that exception into a practical application. Thus, representative claim 1 is not directed to the aforementioned abstract idea.

Therefore, under the Revised Guidance *Step 2A, Prong 2*, the Examiner has not properly considered whether additional elements in the claims integrate the judicial exception into a practical application.

For the above reasons, the Examiner’s rejection of claims 1–20 under 35 U.S.C. § 101 is reversed.

CONCLUSION

In summary:

Claims Rejected	Basis	Affirmed	Reversed
1-20	§ 101		1-20

REVERSED