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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PRABHAKAR GOYAL and JATIN PATEL

Appeal 2017-007297
Application 11/828,789¹
Technology Center 3600

Before ERIC B. CHEN, MATTHEW R. CLEMENTS, and
SCOTT E. BAIN, *Administrative Patent Judges*.

CLEMENTS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1, 4–12, 14–20, and 22. Claims 2, 3, 13, and 21 are canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Appellants identify the real party in interest as “Yahoo! Inc.” App. Br. 3.

STATEMENT OF THE CASE

Appellants' invention scores the effectiveness of rich media advertising. Spec. ¶¶ 1–2. A rich media advertisement (RMA) tracks interactions with the online viewer, e.g., printing of a gift card or playing/pausing of a video. *Id.* at ¶ 31. The invention tracks and scores RMA interactions for an advertising campaign. *Id.* Each RMA earns a weighted score $W_j * N_j * D_j$ for its detected interactions: the product of a weight W_j for the interaction, the amount N_j of interaction, and a weight D_j for the brand. *Id.* at ¶¶ 31, 34, 36.

The RMAs are organized into buckets, e.g., by types of interaction. *Id.* at ¶¶ 32, 34, 36. Each bucket earns a bucket brand index (BBI) of $\sum W_j * N_j * D_j$; the sum of the weighted scores for included RMAs. *Id.* Each bucket also has a weight W_i (separate from the weighted scores) and weighted bucket value $W_i * BBI_i$. *Id.* at ¶ 54. An advertising campaign earns an overall brand index (OBI) of $\sum W_i * BBI_i$; the sum of all weighted bucket values. *Id.* at ¶ 32.

Claims 1, 6, 10, and 17 are independent. Claim 1 is reproduced below and is the representative claim for the sole rejection on appeal (listed *infra*). *See* 37 C.F.R. 41.37(c)(1)(iv) (representative claims).

1. A method for identifying the effectiveness of rich media advertising campaign using a brand index (BI), the method executable by an electronic device having a processor and memory, the method comprising:

for each of a plurality of rich media advertisements associated with a common interactive rich media advertising campaign:

categorizing, with the processor, advertising exposure of a rich media advertisement and an associated user interaction into at least one category, wherein each category has a corresponding category bucket stored in the memory;

assigning, with the processor, a score to the advertisement exposure and associated user interaction and saving the score into a category bucket associated with a category of the advertisement and associated user interaction;

assigning, with the processor, a bucket weight to each category bucket;

calculating, with the processor, a bucket brand index (BBi) for each category bucket, by tracking a frequency of occurrence of the rich media advertisements associated with a bucket and calculating the BBi for the bucket as a product of the bucket score and the tracked frequency of each advertisement exposure and associated user interaction associated with the bucket;

calculating, with the processor, a weighted sum of the plurality of BBIs to generate an overall brand index (BI) for the advertising campaign by summing the bucket weight of each bucket times the BBi of each respective bucket; and

communicating the BI of the advertising campaign to an advertiser or publisher as an indication of monetization value of the rich media advertisement campaign.

App. Br. 12 (Claims Appendix).

THE REJECTION

Claims 1, 4–12, 14–20, and 22 stand rejected under 35 U.S.C. § 101 as directed to patent ineligible subject matter. Final Act. 3–6.

PRINCIPLES OF LAW

The Supreme Court has long held that “[l]aws 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 *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589–90 (2013)). The “abstract ideas” category embodies the longstanding rule that an idea, by itself, is not patentable. *Alice Corp.*, 134 S. Ct. at 2354–55 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

In *Alice*, the Supreme Court set 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.” *Id.* at 2355. 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.* There is no definitive rule to determine what constitutes an “abstract idea.” Rather, the Federal Circuit has explained that “both [it] and the Supreme Court have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016); *see also Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (explaining that, in determining whether claims are patent-eligible under § 101, “the decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided”). The Federal Circuit also noted that

“examiners are to continue to determine if the claim recites (i.e., sets forth or describes) a concept that is similar to concepts previously found abstract by the courts.” *Amdocs*, 841 F.3d at 1294 n.2 (internal citation omitted).

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.” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 79, 78 (2012)). 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.* (quoting *Mayo*, 566 U.S. at 73). Mere use of computers, even in conjunction with other hardware, does not alone transform an abstract idea to significantly more. *See, e.g., Content Extraction & Transmission LLC v. Wells Fargo Bank*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (patent-ineligible claims requiring a computer and scanner); *CLS Bank Int’l v. Alice Corp. Pty.*, 717 F.3d 1269, 1286 (Fed. Cir. 2013) (“[S]imply appending generic computer functionality to lend speed or efficiency . . . does not meaningfully limit claim scope for purposes of patent eligibility.”), *aff’d by Alice*.

EXAMINER’S FINDINGS

The Examiner finds claim 1 is “directed to a system and method for calculating advertising scores and optimizing ad campaigns, which is

considered an abstract idea using a fundamental economic practice and simply a series of mathematical formulations and/or relationships.” Final Act. 4. As to the claim elements, the Examiner adds: “the brand index (BI) amounts to nothing more than mere mathematical relationships and/or formulations calculated as part of routine and conventional operations” (*id.* at 6); and “the use of a generically recited data processor for implementing the allocation and communication links . . . is considered generic/routing computer technology” (*id.* at 5). The Answer summarizes: “[W]hat the [claim] is describing is merely the resultant of a mathematical operation/calculation performed to calculate a brand index (BI). . . . “The ‘communicating’ is . . . extrasolution activity, and everything prior . . . is considered abstract.” Ans. 5.

STEP ONE (ABSTRACT IDEA)

Appellants argue claim 1 recites more than a fundamental economic practice and mathematical formulations because “the method includes a concrete communication to an advertiser in the form of a brand index. This is not mere post solution activity, as the purpose of the claimed method is to communicate the effectiveness of the rich media campaign to an advertiser or publisher.” *Id.* at 8. We are not persuaded of error.

As an initial matter, we do not agree that the brand index or the communication of a brand index is “concrete.” The brand index is merely a number intended to represent the effectiveness of an ad. We agree with the Examiner that

[r]egardless of what type of ads are being displayed or monitored, how valuable those ads may or may not be to the

advertisers and/or publishers, and whether a different user activity is monitored to determine effectiveness, the claimed subject matter is still simply directed to calculating advertising scores that represent effectiveness values, and at best the purported solutions idea/business method itself.

Ans. 3. The claimed communicating merely collects and presents information. *See Elec. Power Grp. LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (“collecting information, analyzing it, and displaying certain results of the collection and analysis”); *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1258 (Fed. Cir. 2016) (“communicating regional broadcast content to an out-of-region recipient”); *In re Salwan*, 681 F. App’x 938, 941 (Fed. Cir. 2017) (nonprecedential) (“storing, communicating, transferring, and reporting patient health information”); *Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App’x 988, 992 (Fed. Cir. 2014) (nonprecedential) (“using categories to organize, store, and transmit information”).

Even assuming the claimed communicating of the brand index was “concrete,” it embodies the Supreme Court’s following caution as to post-solution activity:

The notion that post-solution activity, no matter how conventional or obvious in itself, can transform an unpatentable principle into a patentable process exalts form over substance. A competent draftsman could attach some form of post-solution activity to almost any mathematical formula; [e.g.,] a final step indicating that the formula, when solved, could be usefully applied[.]

Parker v. Flook, 437 U.S. 584, 590 (1978). Here, like in *Parker*, the claimed communicating is a final step performed after solving the equations that generate the index numbers (BBIs and OBI).

Appellants also argue the Examiner has, in characterizing the claimed method, assessed claim 1 at a “level of abstraction . . . untethered from the language of the claims.” App. Br. 9. Specifically, Appellants argue that “[t]he claims are not directed to all forms of calculating a score or all forms of optimizing advertisement campaigns, but instead are specifically directed to a particular way of identifying the effectiveness of the campaign.” *Id.*

To the extent Appellants are arguing that the Examiner over-generalized the claims, we are not persuaded because the Examiner maps the claimed calculations and input/output data—i.e., maps *all claim elements* prior to the post-solution communicating—respectively to the abstract idea and its field of use. *See supra*, “Examiner’s Findings” section. The Examiner thus “articulate[s] what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful.” *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1347 (Fed. Cir. 2017).

To the extent Appellants are arguing preemption, this argument is not persuasive. “While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). Importantly, the preemption concern is addressed by the two-part test considered above. *See id.* After all, every patent “forecloses . . . future invention” to some extent, *Mayo*, 566 U.S. 79–78, and, conversely, every claim limitation beyond those that recite the abstract idea limits the scope of

the preemption. *See Ariosa*, 788 F.3d at 1379 (“The Supreme Court has made clear that the principle of preemption is the basis for the judicial exception to patentability. . . . For this reason, questions on preemption are inherent in and resolved by the § 101 analysis.”).

For the foregoing reasons, we are not persuaded the Examiner erred in step one of *Alice*.

STEP TWO (INVENTIVE CONCEPT)

Turning to the second step of the *Alice* inquiry, Appellants argue the claims are directed to a specific improvement to computer functionality, specifically “translat[ing] rich media exposure and user interaction into [a] brand effectiveness [score].” App. Br. 9. We are not persuaded. As the Examiner finds, converting “rich media exposure” (product of the interaction weight W_j , interaction amount N_j , and brand weight D_j) into a “brand effectiveness score” (BBI and OBI) is merely a field-of-use context of the abstract idea. Ans. 3, 5, 10. That is, these claim elements specify the RMA attributes and observations (field of use) that are weighted and then converted to index numbers (abstract idea). *See Amdocs*, 841 F.3d at 1311 (“The Pythagorean Theorem cannot be made eligible by confining its use to existing surveying techniques[.] *Flook*, 437 U.S. at 590[.]”). We agree with the Examiner that “the claimed subject matter has provided no actual improvement to the machine or technology itself, but at best [] might result in greater revenue-based opportunities and thus, [is] merely a non-technical improvement to the abstract idea itself.” Ans. 3–4.

Appellants further argue “the process of computing a brand index is wholly novel and unconventional, as the PTO has conceded by not rejecting the claims in view of the prior art.” App. Br. 9; *see also id.* at 7 (“[U]ser interaction with a rich media advertisement . . . is not captured in any current monetization model.”). This argument is not persuasive because Appellants have not identified a novel claim feature separate from the abstract idea. *See Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (“[A] claim for a new abstract idea is still an abstract idea. The search for a § 101 inventive concept is thus distinct from demonstrating § 102 novelty.”).

Appellants also argue the Examiner improperly distills the issue of inventive concept to a question of whether claim 1 recites an “improvement to the computer itself.” Reply Br. 3. In particular, citing *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016), Appellants contend an inventive concept “can be an improvement in the function implemented by the computer.” *Id.* We are not persuaded because *McRO*’s holding does not extend to all improvements of a computer-implemented function. As the court explains at length, *McRO*’s invention is patent-eligible because it unconventionally automates a function. 837 F.3d at 1313–15. In *Alice*’s terminology, *McRO*’s invention thus improved the “technological process” of automating a function—not (merely) the function. *Alice*, 134 S. Ct. at 2358. Appellants’ claim 1, in contrast, at best adds a new function—i.e., calculation of RMA effectiveness—to the field of the invention, as opposed to unconventionally automating the calculation of that function.

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DECISION

For the foregoing reasons, we affirm the Examiner's decision rejecting claims 1, 4–12, 14–20, and 22.

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