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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/312,210	12/06/2011	True Xiong	114514-072UT1	1787
103865	7590	12/31/2019	EXAMINER	
Procopio - SPE 525 B Street Suite 2200 San Diego, CA 92101			MISIASZEK, AMBER ALTSCHUL	
			ART UNIT	PAPER NUMBER
			3624	
			NOTIFICATION DATE	DELIVERY MODE
			12/31/2019	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte TRUE XIONG, LEO PEDLOW,
VIRAL MEHTA, ERIC HOLCOMB and KATHY FIELDER

Appeal 2018–008241
Application 13/312,210
Technology Center 3600

Before CARL W. WHITEHEAD JR., JEFFREY S. SMITH
and RUSSELL E. CASS, *Administrative Patent Judges*.

WHITEHEAD JR., *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant is appealing the final rejection of claims 1–15 under 35 U.S.C. § 134(a).¹ Appeal Brief 2. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies Sony Corporation as the real party in interest. Appeal Brief 2.

Introduction

The invention is directed to “live streaming of contents and services, and more specifically, to placing advertisement, informational and/or promotional material to the contents and services being streamed live to client devices.” Specification 1.

Representative Claim

1. A method of placing targeted advertisement, informational or promotional material into a live stream event streamed to a client device, the method comprising:

 establishing, by an advertising computer, a private relationship with the client device;

 receiving, at the advertising computer, statistical studies performed of a pattern of behavior of client devices in private relationships with respect to contents and services streamed live to the client devices,

 wherein the pattern of behavior of the client devices in the private relationships includes characteristics of users of the client devices and interface hardware coupled to the client devices;

 preparing and storing, at the advertising computer, the advertisement, informational or promotional material based on the statistical studies so that the targeted advertisement, informational or promotional material can be streamed live from the advertising computer to the client device within an infrastructure of the private relationship;

selecting, by the advertising computer, from the stored advertisement, informational or promotional material targeted to a user of the client device; and

automatically placing, by the advertising computer, the selected advertisement, informational or promotional material into a temporally and spatially appropriate position of the live stream event streamed to the client device subsequent to the establishment of the private relationship,

wherein a type of the advertisement, informational or promotional material streamed live into the temporally and spatially appropriate position of the live stream event is based on factors including a phase of the live stream event, a location of the client device, a timing of the client device's entry into the live stream event, and capabilities of the client device.

Appeal Brief 15–16 (Claims Appendix).

Rejection on Appeal

Claims 1–15 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to patent-ineligible subject matter. Final Action 3–7.

ANALYSIS

Rather than reiterate the arguments of Appellant and the Examiner, we refer to the Appeal Brief (filed December 18, 2018), the Final Action (mailed May 18, 2017) and the Answer (mailed April 26, 2018), for the respective details.

The Examiner determines the claims are patent ineligible under 35 U.S.C. § 101. *See* Final Action 2. As discussed below, we agree with the Examiner’s determination because the claims are directed to an abstract idea comprising commercial or legal interactions (advertising, marketing), a certain method of organizing human activity, and do not include additional elements that are sufficient to amount to significantly more than the abstract idea. *See Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 217 (2014) (describing the two-step framework “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts”).

After the mailing of the Answer and the filing of the Brief in this case, the USPTO published revised guidance on the application of § 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (hereinafter “Memorandum”).² Under the Memorandum, 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 In January 2019, the United States Patent and Trademark Office (“USPTO”) published revised guidance on the application of 35 U.S.C. § 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (January 7, 2019) (“2019 Guidance”), *updated by* USPTO, *October 2019 Update: Subject Matter Eligibility* (available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf) (jointly referred to as “the 2019 Guidance”); *see also* October 2019 Patent Eligibility Guidance Update, 84 Fed. Reg. 55942 (October 18, 2019) (notifying the public of the availability of the October update).

(2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h) (9th ed. 2018).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, does the Office then 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.

See Memorandum.

We are not persuaded the Examiner’s rejection is in error. Unless otherwise indicated, we adopt the Examiner’s findings and conclusions as our own. We add the following primarily for emphasis and clarification with respect to the Memorandum.

Alice/Mayo—Step 1 (Abstract Idea)

Step 2A—Prongs 1 and 2 identified in the Revised Guidance

Step 2A, Prong One

Appellant contends “the claimed method relates to addressing a problem with having to place targeted ad into a live stream.” Appeal Brief

10. Appellant further contends:

[C]laim 1 emphasizes the establishment of a private relationship and the statistical studies of a pattern of behavior of the client device, and the placement of the selected ad into a temporally and spatially appropriate position within the live stream event subsequent to the establishment of the private relationship. That is, the claim does not recite a basic concept that is similar to any abstract idea previously identified by the courts.

Appeal Brief 11.

The Specification discloses:

The type of advertisement, informational and/or promotional material for contents and services being streamed live to the client devices can be based on several factors. The factors can include the phase of the live stream event (e.g., the half time of a sporting event), the physical location of the client device (e.g., indicated by its IP address), the timing of the client device's entry into the stream (e.g., just when the batter in a baseball game hits a homerun), the capabilities of the client device (e.g., that the client device is a 3-D capable device), and other personal information of the user of the client device known to the source host (e.g., that the user is a student who likes college football).

Specification 5–6.

Claim 1 recites a “method of placing targeted advertisement, informational or promotional material into a live stream event streamed to a client device” including the steps of:

1. establishing, by an advertising computer, a private relationship with the client device;
2. receiving, at the advertising computer, statistical studies performed of a pattern of behavior of client devices in private relationships with respect to contents and services streamed live to the client devices;
3. wherein the pattern of behavior of the client devices in the private relationships includes characteristics of users of the client devices and interface hardware coupled to the client devices;
4. preparing and storing, at the advertising computer, the advertisement, informational or promotional material based on the statistical studies so that the targeted advertisement, informational or promotional material can be streamed live from the advertising computer to the client device within an infrastructure of the private relationship;
5. selecting, by the advertising computer, from the stored advertisement, informational or promotional material targeted to a user of the client device;

6. automatically placing, by the advertising computer, the selected advertisement, informational or promotional material into a temporally and spatially appropriate position of the live stream event streamed to the client device subsequent to the establishment of the private relationship;

7. wherein a type of the advertisement, informational or promotional material streamed live into the temporally and spatially appropriate position of the live stream event is based on factors including a phase of the live stream event, a location of the client device, a timing of the client device's entry into the live stream event, and capabilities of the client device.

These steps comprise “commercial or legal interactions” in the form of “advertising, marketing, or sales activities” which the Memorandum identifies as one of the “certain methods of organizing human activity” that constitutes an abstract idea. Memorandum, Section I (Groupings of Abstract Ideas), at 52; *see also* Specification 1–4. Our reviewing court has found claims to be directed to an abstract idea when they recited similar subject matter. *See Bancorp*, 687 F.3d at 1280 (concluding that “managing a stable value protected life insurance policy by performing calculations and manipulating the results” is an abstract idea); *see also buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (holding that concept of “creating a contractual relationship—a ‘transaction performance guaranty’” is an abstract idea); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (holding that claim “describ[ing] only the abstract idea of showing an advertisement before delivering free content” is patent ineligible); *In re Ferguson*, 558 F.3d 1359, 1364 (Fed. Cir. 2009) (holding methods “directed to organizing business or legal relationships in the structuring of a sales force (or marketing company)” to be ineligible). Therefore, we conclude the claims recite an abstract idea pursuant to Step

2A, Prong One of the Memorandum. *See* Memorandum, Section III(A)(1) (Prong One: Evaluate Whether the Claim Recites a Judicial Exception).

Step 2A, Prong Two (Integration into a Practical Application)

Under Prong Two of the Memorandum, we must determine “whether the claim as a whole integrates the recited judicial exception into a practical application of the exception.” It is noted that a “claim that integrates a judicial exception into a practical application will apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception.” Memorandum, Section III(A)(2).

Appellant argues, “when looked at as a whole, independent claim 1 is directed to a patentable, technological improvement over the existing advertising in live stream events” and, further, “claim 1 uses limited rules/steps in a process specifically designed to achieve an improved technological result in the conventional industry practice.” Appeal Brief 12. Appellant contends, “[a]lthough claim 1 broadly and categorically claims placing targeted advertisement, informational or promotional material into a live stream event, claim 1 is still limited to placing targeted advertisement, informational or promotional material into a live stream event streamed to a client device.” Appeal Brief 13.

As the Federal Circuit has explained, a “claim for a *new* abstract idea is still an abstract idea.” *Synopsis, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016). Even assuming the technique claimed was “[g]roundbreaking, innovative, or even brilliant,” that would not be enough

for the claimed abstract idea to be patent eligible. *See Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013).

Further, we find Appellant’s claims are distinguished from those claims that our reviewing court has found to be patent eligible by virtue of reciting technological improvements to a computer system. *See, e.g., DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1249, 1257 (Holding that claims reciting computer processor for serving “composite web page” were patent eligible because “the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.”); *see also Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1259 (Fed. Cir. 2017) (holding that claims directed to “an improved computer memory system” having many benefits were patent eligible); and Appeal Brief 11–13.

In *McRO*,³ the Federal Circuit concluded that the claim, when considered as a whole, was directed to a “technological improvement over the existing, manual 3-D animation techniques” through the “use [of] limited rules . . . specifically designed to achieve an improved technological result in conventional industry practice.” *McRO*, 837 F.3d at 1316. Specifically, the Federal Circuit found that the claimed rules allow computers to produce accurate and realistic lip synchronization and facial expressions in animated characters that previously could only be produced by human animators; and the rules are limiting because they define morph weight sets as a function of phoneme sub-sequences. *McRO*, 837 F.3d at 1313.

³ *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1303 (Fed. Cir. 2016).

We find no evidence of record here that the present situation is like the one in *McRO* where computers were unable to make certain subjective determinations, i.e., regarding morph weight and phoneme timings, which could only be made prior to the claimed invention by human animators. *See* Appeal Brief 11–13. The Background section of the *McRO* ‘576 patent includes a description of the admitted prior art method and the shortcomings associated with that prior method. *See McRO*, 837 F.3d at 1303–06. There is no comparable discussion in Appellant’s Specification or elsewhere of record.

Subsequently, we do not find Appellants’ arguments persuasive because the claims utilize an advertising computer, as well as, a client’s device without any improvement to the functioning of the devices. *See* Specification 5–7 (“The implementation of the above factors in incorporating the advertisement, informational and/or promotional material into the contents and services being streamed live can be facilitated by configuring the live streaming system within the infrastructure of an existing private relationship such as a server-client relationship.”); *see also Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016) (“[W]e find it relevant to ask whether the claims are directed to an improvement to computer functionality versus being directed to an abstract idea . . . the focus of the claims is on the specific asserted improvement in computer capabilities (i.e., the self-referential table for a computer database) or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.”). The claims do not recite an additional element or elements that reflect an improvement in the functioning of a computer, or an improvement to any other technology or technical field. *See*

Alice, 573 U.S. at 222 (“In holding that the process was patent ineligible, we rejected the argument that ‘implement[ing] a principle in some specific fashion’ will ‘automatically fal[l] within the patentable subject matter of § 101.’”) (quoting *Parker v. Flook*, 437 U.S. 584, 593 (1978)).

We detect no additional element (or combination of elements) recited in Appellant’s representative claim 1 that integrates the judicial exception into a practical application. *See* Memorandum, Section III(A)(2). For example, Appellant’s claimed additional elements (e.g., “advertising computer” “client’s device”): (1) do not improve the functioning of a computer or other technology; (2) are not applied with any particular machine (except for a generic computer); (3) do not effect a transformation of a particular article to a different state; and (4) are not applied in any meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception. *See* MPEP §§ 2106.05(a)-(c), (e)-(h).

Accordingly, we determine the claim does not integrate the recited judicial exception into a practical application. *See* Memorandum, Section III(A)(2) (Prong Two: If the Claim Recites a Judicial Exception, Evaluate Whether the Judicial Exception Is Integrated Into a Practical Application).

Alice/Mayo—Step 2 (Inventive Concept)
Step 2B identified in the Memorandum

Step 2B

Next, we determine whether the claim includes additional elements that provide significantly more than the recited judicial exception, thereby

providing an inventive concept. *Alice*, 573 U.S. at 217–18 (quoting *Mayo*, 566 U.S. at 72–73).

Appellant argues, “claim 1 is more than simply using a computer as a tool to automate conventional activity” based upon:

- (a) establishing a private relationship with the client device;
- (b) receiving statistical studies performed of a pattern of behavior of client devices in private relationships with respect to contents and services streamed live to the client devices;
- (c) preparing and storing the ad based on the statistical studies so that the targeted ad can be streamed live within an infrastructure of the private relationship; and
- (d) selecting and placing the selected ad into a temporally and spatially appropriate position of the live stream event subsequent to the establishment of the private relationship.

Appeal Brief 13.

In *Bascom*, our reviewing court found that while the claims of the patent were directed to an abstract idea, the patentee alleged an “inventive concept can be found in the ordered combination of the claim limitations that transform the abstract idea of filtering content into a particular, practical application of that abstract idea.” *Bascom Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1352. In particular, the patent claimed “a technology-based solution (not an abstract-idea-based solution implemented with generic technical components in a conventional way) to filter content on the Internet that overcomes existing problems with other Internet filtering systems.” *Bascom*, 827 F.3d at 1351. Claim 1 is distinguishable, as it recites an abstract-idea-based solution, that is, a targeted advertisement method, implemented with a generic technical component (advertising computer), in a conventional way. (See Specification 5–7). Therefore, we are not persuaded that ordered

combinations of steps in claim 1 provide an inventive concept. *See* Memorandum 56.

Accordingly, we conclude claims 1–15 are directed to commercial or legal interactions (advertising/marketing), which are among the certain methods of organizing human activity identified in the Memorandum that constitute an abstract idea, and that the claims do not recite limitations that amount to significantly more than the abstract idea itself. We sustain the Examiner’s 35 U.S.C. § 101 rejection of claims 1–15.

CONCLUSION

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–15	101	Eligibility	1–15	

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). *See* 37 C.F.R. § 1.136(a)(1)(v).

AFFIRMED