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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte EBBE ALTBURG, SCOTT FABER, RON HIRSON,
BEN HARRIS LYON, PAUL G. MANCA,
SEAN VAN DER LINDEN, and
VIRGINIA HONG-JIA YANG

Appeal 2017-009663
Application 11/737,975
Technology Center 3600

Before: ST. JOHN COURTENAY III, LARRY HUME, and
JOYCE CRAIG, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants¹ appeal under 35 U.S.C. § 134(a) from a non-final rejection of claims 1–3, 5–8, and 10–19. Claims 4, 9, and 20 are cancelled.

We have jurisdiction over the pending claims under 35 U.S.C. § 6(b).

We Affirm.

¹ According to Appellants, the real party in interest is Yellowpages.com.
App. Br. 2.

STATEMENT OF THE CASE

Introduction

Appellants' invention generally relates to "connecting people via virtual reality for real time communications." (Spec. ¶ 1).

Exemplary Claim

1. A method, comprising:

receiving, by a connection server system from a virtual reality server, information regarding a context of an advertising opportunity in a virtual reality world, wherein (a) the virtual reality world provides a customer with immersion in, navigation in, and manipulation of at least one of a character or an object in the virtual reality world, (b) a virtual object of an advertiser senses the surrounding conditions in the virtual reality world, and (c) the context comprises interaction of a customer avatar of the customer with the virtual object of the advertiser;

selecting, by the connection server system, an advertisement for the advertiser based on the context, wherein the advertisement is one of a plurality of advertisements pre-associated with the virtual object in a database of the virtual reality server;

identifying, by the connection server system, an availability of the advertiser to communicate with the customer via a real time communications session based at least in part on a virtual location in the virtual reality world of an advertiser avatar of the advertiser;

assigning, by the connection server system, a reference to the advertisement, wherein the reference (a) comprises one selected from the group consisting of a telephone number of a connection provider without an extension, a telephone number with an extension of the connection provider, a session initiation protocol uniform resource identifier, and a voice over Internet protocol user identifier, and (b) is used to request

connection of a real time communications session with the advertiser;

embedding the reference in the advertisement;

causing, by the connection server system via the virtual reality server, presentation of the advertisement comprising the embedded reference in the virtual reality world, wherein the advertisement indicates the availability of the advertiser to communicate with the customer via a real time communications session;

receiving, by the connection server system, a request for connection of a real time communications session via the reference embedded in the advertisement;

in response to the request for connection of a real time communications session, connecting, by the connection server system, the customer to the advertiser via a real time communications session; and

charging the advertiser, by the connection server system, an advertisement fee based on the connecting of the customer and the advertiser for the real time communications session via the reference embedded in the advertisement.

App. Br. 31–33, Claims App’x.

Rejection

Claims 1–3, 5–8, and 10–19 are rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Non-Final Act. 2.

Issue on Appeal

Did the Examiner err in rejecting claims 1–3, 5–8, and 10–19 under 35 U.S.C. § 101 as being directed to a judicial exception, without significantly more?

ANALYSIS

We have considered all of Appellants' arguments and any evidence presented. To the extent Appellants have not advanced separate, substantive arguments for particular claims, or other issues, such arguments are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). We highlight and address specific findings and arguments for emphasis in our analysis below.

Mayo/Alice Analysis under 35 U.S.C. § 101

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.*, 569 U.S. 576, 589 (2013)). The Supreme Court in *Alice* reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 82–84 (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, such as an *abstract idea*. Abstract ideas may include, but are not limited to, fundamental economic practices, methods of organizing human activities, an idea of itself, and mathematical formulas or relationships. *Id.* at 2355–57.

If the claims are *not directed* to a patent-ineligible concept, *the inquiry ends*. See *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1262 (Fed. Cir. 2017).

Otherwise, the inquiry proceeds to the second step in which the elements of the claims are considered “individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 79, 78). We consider the question of whether the claims are directed to a *specific improvement* in the capabilities of the computing devices, or, instead, “a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

We, therefore, decide under step two whether the claims: (a) set forth an *inventive concept* that provides a specific means or method that *improves* the relevant technology, or (b) are directed to a result or effect that itself is the abstract idea, in which the claims merely invoke generic processes and machinery. See *Enfish*, 822 F.3d at 1336.

The Examiner’s Rejection under 35 U.S.C. § 101

Regarding the first step of the *Alice/Mayo* analysis, the Examiner concludes claims 1–3, 5–8, and 10–19 are directed to an abstract idea, because:²

² “Patent eligibility under § 101 presents an issue of law” *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1340 (Fed. Cir. 2013).

[P]resenting advertisements based on the availability of the advertiser to communicate with the customer [is an abstract idea]. The limitations that set forth the abstract idea are: receiving, identifying, assigning, causing and charging the advertiser based on connecting the customer to the advertiser. In other words, the claim describes collecting and comparing known information.

Non-Final Act. 2.

The Examiner additionally notes that collecting and comparing known information is an abstract idea, similar to (the '283) claim in *Classen*.³ The Examiner thus concludes: “Similarly, [c]laim 1 discloses receiving information regarding a context; receiving a request for connection (i.e. collecting information) and identifying an availability of the advertise[r] to communicate with the customer; causing presentation of the advertisement and billing the advertiser based on the connecting of the customer and the advertiser (i.e. comparing known information).” *Id.* at 2–3.

Regarding the second step of the *Mayo/Alice* analysis, the Examiner concludes:

The additional elements of using a connection server system, manipulation of a character in the virtual reality world, a telephone, a session initiation protocol resource identifier and Voice over Internet protocol in independent claim 1 [are] not enough to qualify as “significantly more” than the abstract idea itself, since the claims are mere instruction[s] to apply the abstract idea because they are routine in any computer implementation (i.e. receiving, manipulating, selecting, identifying, assigning and charging). Under *Alice*, that is not

³ The Examiner is referring to *Classen Immunotherapies, Inc. v. Biogen IDEC*, 659 F.3d 1057, 1067–68 (Fed. Cir. 2011) (“Claim 1 of the '283 patent states the idea of *collecting and comparing known information . . . the abstraction* of the '283 claim is unrelieved by any movement from principle to application.”) (emphasis added).

sufficient “to transform an abstract idea into a patent eligible invention” Id. See July 2015 Update to the 2014 Interim Guidance on Subject Matter Eligibility; *Alice*; *Ultramercial*; *buySAFE, Inc. v. Google, Inc.*; *Cyberfone Systems, LLC v. CNN Interactive Group, Inc.*

Non-Final Act. 3.

For the aforementioned reasons, the Examiner concludes that all claims 1–3, 5–8, and 10–19 on appeal are not patent eligible under 35 U.S.C. § 101.

Mayo/Alice Analysis — Step 1

Regarding *Alice* Step 1, Appellants contend the Examiner has not considered each of the claims as a whole and has not provided a reasoned rationale that the claims are directed to an abstract idea. App. Br. 7–11.

Appellants further contend: “[T]he Examiner *must demonstrate* why Claims 1–3, 5–8, and 10–19 are so similar to a concept that a court has identified as abstract that the court case necessarily controls the result. However, the case referenced as being similar by the Examiner does not support the Examiner’s position.” App. Br. 13. (underline in original replaced with italics for emphasis).

In response, the Examiner further explains the basis for the rejection:

[T]he claims are directed to presenting advertisements based on the availability of the advertiser to communicate with the customer. This is similar to collecting information and comparing known information as evidenced by *Classen*. Similarly, claim 1 discloses receiving information regarding a context; receiving a request for connection (i.e. collecting information) and identifying an availability of the advertise to communicate with the customer; causing presentation of the advertisement and billing the advertiser based on the connecting

of the customer and the advertiser (i.e. comparing known information).

In addition, presenting advertisements based on availability of the advertisers to communicate with the customers, in that context, providing marketing offers/advertisements is a fundamental economic and conventional business practice. The courts have held certain fundamental economic and conventional business practices. Like advertisement and marketing in *Ultramerical*. The presentment of advertisement of claim 1 is similar to *Ultramerical*, and thus, claim 1 is directed to an abstract idea.

Ans. 2.

Applying the first step of the *Mayo/Alice* framework, we agree with the Examiner that the claims are directed to an abstract idea, i.e., to advertising – a conclusion fully consistent with the Specification, including the claim language.⁴ See Spec. ¶¶ 12–14, 16–17. *Tuxis Technologies, LLC v. Amazon.com, Inc.*, No. CV 13-1771-RGA, 2014 WL 4382446, at *5 (D. Del. Sept. 3, 2014) (Matching consumers with a given product or service “has been practiced as long as markets have been in operation.”). See also *Morsa v. Facebook, Inc.*, 77 F. Supp.3d 1007, 1013-14 (CD. Cal. 2014), *aff'd* 622 F. App'x 915 (Fed. Cir. 2015) (concluding that targeted **advertising** is an abstract idea).

⁴ During prosecution, claims must be given their broadest reasonable interpretation when reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Under this standard, we interpret claim terms using “the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

Here, we find advertising is “a fundamental economic practice long prevalent in our system of commerce” and “a building block of the modern economy.” *Alice*, 134 S. Ct. at 2356. The Federal Circuit has concluded that various forms of advertising were directed to an abstract idea in at least two precedential cases. *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1370 (Fed. Cir. 2015) (tailoring of advertisements); *Ultracomercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 714-15 (Fed. Cir. 2014) (“using advertising as an exchange or currency”).

Additionally, the collection of information and analysis of information (e.g., recognizing certain data within the dataset) are also abstract ideas. *Elec. Power*, 830 F.3d at 1353. Similarly, “collecting, displaying, and manipulating data” is an abstract idea. *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017); *see also SAP Am., Inc. v. InvestPic, LLC*, 890 F.3d 1016, 1021 (Fed. Cir. 2018) (“merely presenting the results of abstract processes of collecting and analyzing information . . . is abstract as an ancillary part of such collection and analysis”) (quotations omitted).

Applying this guidance here, we agree with the Examiner (Non-Final Act. 2) that Appellants’ claimed method for “presenting advertisements based on the availability of the advertiser to communicate with the customer,” is directed to a fundamental economic practice.

For at least these reasons, we conclude claims 1–3, 5–8, and 10–19 are directed to the abstract idea of a *fundamental economic practice*.

Mayo/Alice Analysis – Step 2

Because we conclude the claims are directed to an abstract idea for essentially the same reasons articulated by the Examiner (Non-Final Act. 2;

Ans. 2), we turn to the second part of the *Alice/Mayo* analysis. We analyze the claims to determine if there are additional limitations that individually, or as an ordered combination, ensure the claims amount to “significantly more” than the abstract idea. *Alice*, 134 S. Ct. at 2357.

Regarding *Alice* Step 2, Appellants address the purported *significantly more* limitations of the claims:

In the present application, Appellant respectfully submits that Claims 1-3, 5-8, and 10-19 (1) include improvements to another technology or technical field (i.e., virtual reality); (5) add a specific limitation other than what is well-understood, routine and conventional in the field, or add unconventional steps that confine the claim to a particular useful application; and (6) include meaningful limitations beyond generally linking the user of an abstract idea to a particular technological environment. In particular, Claims 1-3, 5-8, and 10-19 are direct to virtual reality technologies.

App. Br. 21.

Regarding the use of the recited generic server computer system (claim 1), the Supreme Court held “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Alice*, 134 S. Ct. at 2358; *see also Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1348 (Fed. Cir. 2016) (“An abstract idea on ‘an Internet computer network’ or on a generic computer is still an abstract idea.”).

Our reviewing court has “repeatedly held that such invocations of computers and networks that are not even arguably inventive are ‘insufficient to pass the test of an inventive concept in the application’ of an abstract idea.” *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016) (internal citations omitted); *see also Intellectual Ventures I*

LLC v. Capital One Fin. Corp., 850 F.3d 1332, 1341 (Fed. Cir. 2017) (“Rather, the claims recite both a generic computer element—a processor—and a series of generic computer ‘components’ that merely restate their individual functions That is to say, they merely describe the functions of the abstract idea itself, without particularity. This is simply not enough under step two.”).

Moreover, we find Appellants’ claim 1 that includes a *database* is distinguished from the claims considered by the court in *Enfish*, 822 F.3d at 1336, because Appellants’ method claim 1 is not directed to *an improvement in the database itself*, such as a “self-referential table” that “is a specific type of data structure designed to improve the way a computer stores and retrieves data in memory.” *Enfish*, 822 F.3d at 1339.

Because we find none of Appellants’ claims are directed to an *improvement* in the recited server system or database (claim 1), we conclude that none of the claim limitations, viewed both individually and as an ordered combination, amount to significantly more than the judicial exception in order to sufficiently transform the nature of the claims into patent-eligible subject matter.

In light of the foregoing, we conclude, under the *Mayo/Alice* analyses, that each of Appellants’ claims 1–3, 5–8, and 10–19 considered as a whole, is directed to a *patent-ineligible abstract idea* (under *step one*), and under *step two*, does not recite something “*significantly more*” to transform the nature of the claim into a patent-eligible application.

Accordingly, for the reasons discussed above, we sustain the Examiner's rejection under 35 U.S.C. § 101 of claims 1–3, 5–8, and 10–19, as being directed to patent-ineligible subject matter.⁵

CONCLUSION

The Examiner did not err in rejecting claims 1–3, 5–8, and 10–19 under 35 U.S.C. § 101, as being directed to patent-ineligible subject matter.

DECISION

We affirm the Examiner's decision rejecting claims 1–3, 5–8, and 10–19 under 35 U.S.C. § 101.

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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED

⁵ To the extent Appellants have not advanced separate, substantive arguments for particular claims, or other issues, such arguments are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).