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Row 2: 87851, 7590, 08/01/2018, Facebook/Fenwick, Silicon Valley Center, 801 California Street, Mountain View, CA 94041
Row 3: EXAMINER, REFAI, SAM M
Row 4: ART UNIT, PAPER NUMBER, 3681
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte BRADLEY HOPKINS SMALLWOOD, KURT DODGE RUNKE,
and GOKUL RAJARAM

Appeal 2017-003908
Application 13/354,785
Technology Center 3600

Before JUSTIN BUSCH, JENNIFER L. McKEOWN, and
JOYCE CRAIG, *Administrative Patent Judges*.

CRAIG, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants¹ appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–3, 9–14, 16, 18–20, 24, 25, 27, 28, and 30, which are all of the claims pending in this application.² We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ According to Appellants, the real party in interest is Facebook, Inc. Br. 2.

² Claims 4–8, 15, 17, 21–23, 26, and 29 have been canceled. Final Act. 2.

INVENTION

Appellants' invention relates to pricing and delivery of advertising based on exposure time. Abstract. Claim 1 is illustrative and reads as follows:

1. A method comprising:

receiving, at an ad server from each of one or more advertisers, an ad and an associated purchase of ad presentation time, the ad server comprising one or more hardware processors;

receiving, at the ad server from a client, a request for an ad;

for each received ad:

receiving, by an exposure determination engine from one or more controlled ad mediums, a first amount of presentation time that the ad has been presented to a set of users on the one or more controlled ad mediums, the exposure determination engine comprising one or more hardware processors;

determining, using an external advertising observation engine comprising one or more hardware processors and communicatively coupled to a social networking system and to the exposure determination engine, a second amount of time that the ad has been presented to a second set of users on one or more external ad mediums, each external ad medium comprising a corresponding external ad medium hardware device, the second amount of time determined based on posting activity of each of the second set of users in the social networking system, the posting activity associated with one or more external ad medium hardware devices and being indicative of a likelihood that the user has viewed the ad on the corresponding one or more external ad mediums, and

determining, by the exposure determination engine, a total amount of presentation time by aggregating the first amount of presentation time and the second amount of presentation time; and

selecting, by the ad server, from the received ads an ad for presentation to the client based on the purchased ad presentation time associated with each ad and the determined total amount of presentation time for each ad, for display by the client.

REJECTIONS³

Claims 1–3, 9–14, 16, 18–20, 24, 25, 27, 28, and 30 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to patent ineligible subject matter. Final Act. 3–6.

Claims 1–3, 9–14, 16, 18–20, 24, 25, 27, 28, and 30 stand provisionally rejected on the ground of nonstatutory double patenting as unpatentable over claims 1–20 of Patent Application No. 13/354,849. Final Act. 7–8.

ANALYSIS

We have reviewed the rejections of claims 1–3, 9–14, 16, 18–20, 24, 25, 27, 28, and 30 in light of Appellants’ arguments that the Examiner erred. We have considered in this decision only those arguments Appellants actually raised in the Briefs. Any other arguments Appellants could have made, but chose not to make, in the Briefs are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Appellants’ arguments are not persuasive of error. We agree with and adopt as our own the Examiner’s findings of facts and conclusions as set forth in the Answer and in the Action from which this appeal was taken. We provide the following explanation for emphasis.

³ In the Answer, the Examiner withdrew the rejection of claims 1–3, 9–14, 16, 18–20, 24, 25, 27, 28, and 30 under 35 U.S.C. § 112, first paragraph. Ans. 3.

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. Pty. Ltd. 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).

Appellants first contend the Examiner failed to present a proper prima facie case of patent ineligibility because the Examiner did not explain how the identified abstract idea corresponds to abstract concepts identified by courts. App. Br. 6.

We disagree. The Federal Circuit has repeatedly explained that “the prima facie case is merely a procedural device that enables an appropriate shift of the burden of production.” *Hyatt v. Dudas*, 492 F.3d 1365, 1369 (Fed. Cir. 2007) (citing *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992)). The Examiner carries the burden of establishing a prima facie case when its rejection satisfies 35 U.S.C. § 132 by setting forth a rejection in a sufficiently articulate and informative manner. *In re Jung*, 637 F.3d 1356, 1363 (Fed. Cir. 2011). If the Examiner “adequately explain[s] the shortcomings . . . the burden shifts to the applicant to rebut the prima facie case with evidence and/or argument.” *Hyatt*, 492 F.3d at 1369–70.

The Final Office Action adequately explains the § 101 rejection. *See* Final Act. 3–6. The Examiner’s statements satisfy § 132 because they apply the *Mayo/Alice* analytical framework and apprise Appellants of the reasons for the § 101 rejection under that framework. Appellants have recognized the Examiner’s *Mayo/Alice* analysis and have presented arguments regarding each step. *See* Br. 8–17. Appellants have not responded by alleging a failure to understand the rejection. *Id.*

Appellants next contend the Examiner erred in rejecting the pending claims as directed to an abstract idea. Br. 8. Specifically, Appellants argue claim 1⁴ is not directed to a mathematical relationship or formula, or to “an idea of itself,” as in *Digitech* and *SmartGene*. Br. 8–11. Appellants further argue the Examiner erred because *SmartGene* is not precedential. *Id.* at 10.

⁴ Appellants argue claims 1–3, 9–14, 16, 18–20, 24, 25, 27, 28, and 30 as a group (App. Br. 8), and we choose claim 1 as representative of the group. *See* 37 C.F.R. § 41.37(c)(1)(iv).

We are not persuaded of error. The Examiner’s analysis comports with Federal Circuit decisions. In *SmartGene*, the Federal Circuit decided that claims directed to “comparing new and stored information and using rules to identify medical options” did not satisfy *Alice* step one. See *SmartGene, Inc. v. Advanced Biological Labs., SA*, 555 F. App’x 950, 951–52, 955–56 (Fed. Cir. 2014) (nonprecedential). And in *Digitech*, the Federal Circuit decided that claims directed to “organizing information through mathematical correlations” did not satisfy *Alice* step one. See *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1350–51 (Fed. Cir. 2014).

We agree with the Examiner that the recited step of determining a total amount of presentation time by aggregating the first amount of presentation time and the second amount of presentation time is analogous to the abstract idea in *Digitech*. See Final Act. 4. In other words, the recited determining step employs mathematical algorithms to manipulate existing information to generate additional information, which the *Digitech* court concluded was not patent eligible. *Id.*

Moreover, while *SmartGene* is not precedential, it is persuasive. Our reviewing court concluded the claims at issue in *SmartGene* were patent ineligible because they did “no more than call on a ‘computing device,’ with basic functionality for comparing stored and input data and rules, to do what doctors do routinely.” *SmartGene*, 555 Fed. Appx. at 954. We agree with the Examiner that, in the instant case, the identified steps in claim 1 are directed to data that is being used in an algorithm that calls on an exposure determination engine and an external advertising observation engine comprising one or more hardware processors (i.e. computers) for processing

this data using mathematical comparisons and rule-based processes. Final Act. 3–4. In other words, the claimed steps do not rely on an inventive device or technique for displaying information or new techniques for analyzing information, but rather constitute a generic recitation of steps for mathematically manipulating data. *See id.*

The instant claims are also similar to those in *SmartGene* because the *SmartGene* claims relied on “expert rules” for “evaluating and selecting” from a stored ‘plurality of different therapeutic treatment regimens.’” *SmartGene*, (555 Fed. Appx. at 951–52, claim 1). The “expert rules” in *SmartGene* are analogous to the factors (purchased ad presentation time and determined total amount of presentation time) used to select “an ad for presentation to the client” in claim 1.

Further, the Federal Circuit has ruled that claims merely requiring data collection and analysis—like claim 1—did not pass muster under a § 101 review for patent eligibility. *See, e.g., Smart Sys. Innovations, LLC v. Chi. Transit Auth.*, 873 F.3d 1364, 1368–73 (Fed. Cir. 2017); *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1047, 1054–56 & n.6 (Fed. Cir. 2017); *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1339–40 (Fed. Cir. 2017); *Elec. Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016).

For these reasons, we are not persuaded the Examiner erred in concluding claim 1 is directed to an abstract idea.

Turning to *Alice* step two, Appellants contend the Examiner erred because the claims are “necessarily rooted in the realm of computer networks.” Br. 12 (citing Subject Matter Eligibility Worksheet (<https://www.uspto.gov/sites/default/files/documents/wrksht-sme-ex-2.pdf>)).

Specifically, Appellants argue claim 1 solves the problem of determining ad exposure time in order to serve ads more effectively on a per user basis.

Br. 12. Appellants argue “[a]n ad server only exists in the context of the Internet.” *Id.*

We are not persuaded. The plain language of claim 1 does not limit the ad server to the Internet, and Appellants have presented no broad, reasonable interpretation of “ad server” that requires the Internet. The Specification describes that “an ad may be presented to a user in ways other than by display (for example, an audio ad may be played to the user over the radio)” and that “the principles described herein apply equally to ads which are not presented by display.” Spec. 2. The Specification further describes that “[f]or ads displayed as television commercials or radio commercials, the ad exposure information may include the length of the commercials” and “for such ads, if the user changes the channel or otherwise interrupts the display of the ads, the ad exposure may count only the period of time the ads were displayed to the user.” Spec 7. In light of such descriptions in the Specification, we are also not persuaded by Appellants’ contention that “exposure time was impossible to measure before the Internet.” *See* Br. 13.

Moreover, Appellants have not identified improvements to the Internet or the functioning of the computer itself, or meaningful limitations that do more than generally link the use of the abstract idea to a particular technological environment. *See id.* Unlike the situation in Example 2 of the Subject Matter Eligibility Worksheet (taken from *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014)), we fail to see how measuring ad exposure time is “a challenge particular to the Internet.” Unlike the situation in *DDR Holdings*, there is no indication here that a

computer network, or the Internet, in particular, is used other than in its normal, expected, and routine manner, e.g., for receiving and transmitting information.

The claims at issue in *DDR Holdings* were directed to retaining website visitors, and, in particular, to a system that modified the conventional web browsing experience by directing a user of a host website, who clicks an advertisement, to a “store within a store” on the host website, rather than to the advertiser’s third-party website. *DDR Holdings*, 773 F.3d at 1257–58. The court determined that “the claims address a business challenge (retaining website visitors) [that] is a challenge particular to the Internet.” *Id.* at 1257. The court also determined that the invention was “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks,” and that the claimed invention did not simply use computers to serve a conventional business purpose. *Id.* Rather, there was a change to the routine, conventional functioning of Internet hyperlink protocol. *Id.* Here, even if claim 1 addresses a business challenge on the Internet, the claim is not “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” Instead, as the Examiner concluded, claim 1 uses computers (engines) to serve a conventional business purpose. *See* Ans. 9.

Appellants next contend that, like the claim in Example 2, the claimed combination of computer elements, including the ad server and the exposure determination engine, “meaningfully limits the application of the alleged abstract idea.” Br. 16. Appellants further argue claim 1 is directed to a

specific way of determining exposure time for an advertisement across ad mediums. *Id.* at 17.

We disagree. As the Examiner concluded, the additional elements of claim 1 are simply field of use limitations that attempt to limit the abstract idea to a particular technological environment, and the type of information being manipulated does not impose meaningful limitations or render the idea less abstract. *See* Ans. 10. “[M]erely limiting the field of use of the abstract idea to a particular . . . environment does not render the claims any less abstract.” *Smart Sys. Innovations*, 873 F.3d at 1373 (quotation omitted).

For these reasons, we are not persuaded the Examiner erred in concluding there are no additional elements that transform the nature of claim 1 into patent-eligible subject matter.

Accordingly, we sustain the Examiner’s § 101 rejection of independent claim 1, as well as the Examiner’s § 101 rejection of grouped claims 2, 3, 9–14, 16, 18–20, 24, 25, 27, 28, and 30, not argued separately.

DECISION

We affirm the decision of the Examiner rejecting claims 1–3, 9–14, 16, 18–20, 24, 25, 27, 28, and 30.

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