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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/472,318	05/26/2009	Robert Taaffe Lindsay	26295-15521	7433
87851	7590	10/18/2019	EXAMINER	
Facebook/Fenwick Silicon Valley Center 801 California Street Mountain View, CA 94041			CHOL, PETER H	
			ART UNIT	PAPER NUMBER
			3622	
			NOTIFICATION DATE	DELIVERY MODE
			10/18/2019	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* ROBERT TAAFFE LINDSAY,  
THOMAS GIOVANNI CARRIERO, and  
YUN-FANG JUAN<sup>1</sup>

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Appeal 2018-007993  
Application 12/472,318  
Technology Center 3600

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Before DEMETRA J. MILLS, ERIC B. GRIMES, and RYAN H. FLAX,  
*Administrative Patent Judges.*

GRIMES, *Administrative Patent Judge.*

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims related to measuring the effectiveness of an online advertising campaign, which have been rejected as being directed to patent-ineligible subject matter and as being obvious. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM the rejection based on patent-ineligible subject matter.

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<sup>1</sup> Appellant identifies the Real Party in Interest as Facebook, Inc. Appeal Br. 2. (The Appeal Brief lacks page numbers but we refer to them consecutively beginning with the cover sheet as page 1.) We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42(a).

## STATEMENT OF THE CASE

“[A] social networking system may provide information to members about products or services related to or generated by activities of other members.” Spec. ¶ 51. For example, “[a] member may purchase a product as a result of seeing an online advertisement. . . . [A] member can comment on an online advertisement. . . . Members can discuss a particular product or an advertisement of the product on an online forum.” *Id.*

“Thus, a social network system generates content (herein ‘secondary content’) based on members’ interactions with advertisements, products or services . . . and this secondary content in itself functions as a secondary level of brand promotion.” *Id.* “As a result, the social network system has an impact on the effectiveness of the advertisement.” *Id.*

“The ability to measure the impact of features available in a social network system on the effectiveness of an advertisement is beneficial to advertisers and consumers because it provides an ability to experiment with different strategies so as to improve the generation, distribution and relevance of content generated based on online advertisements.” *Id.* ¶ 53. In addition, “social networking systems that can demonstrate more effective tools and metrics for effective online advertising can attract more advertising revenue.” *Id.*

Claims 1–25, 49–51, and 53–66 are on appeal. Claim 1 is illustrative and reads as follows:

1. A computer implemented method comprising:  
maintaining an account for each of a plurality of users of an online system;  
assigning a first subset of the plurality of users to a sample set;

assigning a second subset of the plurality of users to a control set;  
sending an advertisement for display to a subject user of the plurality of users, the advertisement associated with an online advertising campaign;  
receiving an interaction from the subject user following the display of the advertisement to the subject user, wherein the interaction is with the advertisement or is associated with a product or service identified in the advertisement;  
generating secondary content describing the subject user's interaction and sending the secondary content to users of the online system in a feed via a communication mechanism of the online system;  
for each of a plurality of the users other than the subject user, responsive to detecting the user accessing the online system via the user's account associated with the user:  
    determining whether the user belongs to the sample set of users or the control set of users;  
    responsive to the user belonging to the control set, withholding the secondary content from presentation to the user;  
    responsive to the user belonging to the sample set, providing the secondary content for presentation to the user;  
    sending for presentation, the advertisement to users of the sample set as well as users of the control set; and  
determining, by a computer processor, a measure of effectiveness of the communication mechanism of the online system in enhancing the impact of the online advertising campaign based on information received from users from the control set and from users from the sample set, the measure of effectiveness determining an increase in awareness of the subject of advertisement among users of the online system caused by generating and distributing the secondary content via the communication mechanism of the online system in addition to an increase in awareness caused by presenting the advertisement.

Claims 15 and 53 are also independent and are directed to a system and a nontransitory computer storage medium, respectively, but are substantively the same as claim 1.

The claims stand rejected as follows:

Claims 1–25, 49–51, and 53–66 under 35 U.S.C. § 101 as being directed to non-statutory subject matter (Non-Final Action<sup>2</sup> 2);

Claims 1–4, 7–11, 13–18, 20–24, 53–56, 59–63, 65, and 66 under 35 U.S.C. § 103(a) as obvious in view of Calvert,<sup>3</sup> Goodman,<sup>4</sup> and Konar<sup>5</sup> (Non-Final Action 6);

Claims 5, 6, 19, 57, and 58 under 35 U.S.C. § 103(a) as obvious in view of Calvert, Goodman, Konar, and Abraham<sup>6</sup> (Non-Final Action 21);

Claims 12, 25, and 64 under 35 U.S.C. § 103(a) as obvious in view of Calvert, Goodman, Konar, and Briggs<sup>7</sup> (Non-Final Action 23); and

Claims 49–51 under 35 U.S.C. § 103(a) as obvious in view of Calvert, Goodman, Konar, and Kendall<sup>8</sup> (Non-Final Action 24).

## OPINION

### *Patent Eligibility*

The Examiner has rejected all of the claims on appeal as being directed to patent-ineligible subject matter; specifically, the “abstract idea of determining a measure of effectiveness of the communication mechanism of

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<sup>2</sup> Office Action mailed June 5, 2017.

<sup>3</sup> Calvert et al., US 2003/0014304 A1, published January 16, 2003.

<sup>4</sup> Goodman et al., US 2006/0218577 A1, published September 28, 2006.

<sup>5</sup> Konar, US 2009/0106070 A1, published April 23, 2009.

<sup>6</sup> Abraham et al., US 2009/0204476 A1, August 13, 2009.

<sup>7</sup> Briggs, US 2006/0041480 A1, published February 23, 2006.

<sup>8</sup> Kendall et al., US 2009/0119167 A1, published May 7, 2009.

[an] online system.” Non-Final Action 2. The Examiner finds that the claimed method is similar to concepts that have been identified by courts as abstract ideas; e.g., collecting, comparing, analyzing, and displaying information. *Id.* at 4. “These concepts relate to an ‘idea of [i]tself’ as well as ‘certain methods of organizing human activity.’” *Id.*

The Examiner also finds that the claims do not add significantly more to the abstract idea because “a majority of the limitations are drawn to what the courts have recognized to be computer functions that are well-understood, routine, and conventional” and “[g]eneric computer components recited as performing generic computer functions that are well-understood, routine and conventional activities amount to no more than implementing the abstract idea with a computerized system.” *Id.* at 4–5.

The Examiner concludes that, “taken alone, the additional elements do not amount to significantly more than a judicial exception. Looking at the limitations as an ordered combination adds nothing that is not already present when looking at the elements taken individually.” *Id.* at 5. “[C]laims 1–25, 49–51 and 53–66 either alone and/or as an ordered combination of elements are therefore not drawn to eligible subject matter as they are directed to an abstract idea without significantly more.” *Id.* at 6.

Appellant argues that “[t]he claims include additional limitations . . . which together amount to significantly more than the alleged abstract idea at least for the reason that a specific computer is needed to implement the determination of measure of effectiveness.” Appeal Br. 9. “[T]he claimed method . . . is a technologically complex process that needs a specific computer that can process information received from users from the control

set and from users from the sample set to determine the measure of effectiveness of a communication mechanism of the online system.” *Id.*

Appellant argues that, “[s]imilar to the DDR Holdings case [*DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014)], the claimed invention of the present application concerns effectiveness of communication mechanism of an online system in enhancing the impact of the online advertising campaign by sending secondary content to users of the online system.” *Id.* at 10. Appellant also argues that,

even if the present claims were directed to an abstract idea, the claims do not merely recite this abstract idea and perform it on generic computer components. Instead, the claims recite a specific arrangement of steps that evaluates the impact of online advertising campaigns directed towards members of a social networking service. The underlying improvement to computer functionality that is included in the claims is enough to deem them patent eligible, similar to the Federal Circuit’s ruling in *BASCOM* [*Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016)].

*Id.* at 11–12.

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 concluded that “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable under 35 U.S.C. § 101. *See, e.g., Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

To determine if a claim falls into an excluded category, we apply a 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)). We first determine what 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.”).

Patent-ineligible abstract ideas 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)). In contrast, patent-eligible inventions include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 192 (1981)); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claimed method employed a mathematical formula, but the Supreme Court held that “[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 176; *see also id.* at 192 (“We view respondents’ claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula.”). The Supreme Court noted, however, that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* (citing *Benson* and *Flook*); *see, e.g., id.* at 187 (“It is now commonplace that an

*application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”).

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, and “examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221 (quotation marks omitted). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (quoting *Mayo*, 566 U.S. at 77 (alterations in original)). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

The PTO recently published revised guidance on the application of § 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (January 7, 2019) (“Revised Guidance”). Under that guidance, we first determine 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)).

*See* 84 Fed. Reg. at 54–55. Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then determine whether the claim:

(3) adds a specific limitation beyond the judicial exception that is not a “well-understood, routine, conventional activity” 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* 84 Fed. Reg. at 56.

*Revised Guidance Step 2(A), Prong 1*

Following the Revised Guidance, we first consider whether the claims recite a judicial exception. Claim 1 recites, among other steps, “receiving an interaction from the subject user following the display of the advertisement to the subject user, wherein the interaction is with the advertisement or is associated with a product or service identified in the advertisement.” This step can be performed mentally; for example, hearing someone comment on a product seen in an ad is a form of receiving an interaction associated with an advertised product.

In addition, we agree with the Examiner that the concept recited in claim 1 is similar to the concepts that have been found to be abstract ideas by the courts because they amount to “certain methods of organizing human activity.” Non-Final Action 4 (citing *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709 (Fed. Cir. 2014)). In *Ultramercial*, “claim 1 include[d] eleven steps for displaying an advertisement in exchange for access to copyrighted media.” 772 F.3d at 714. The court held that the

ordered combination of steps recites an abstraction—an idea, having no particular concrete or tangible form. The process of receiving copyrighted media, selecting an ad, offering the media in exchange for watching the selected ad, displaying the

ad, allowing the consumer access to the media, and receiving payment from the sponsor of the ad all describe an abstract idea, devoid of a concrete or tangible application.

*Id.* at 715.

Claim 1 on appeal is similar to claim 1 in *Ultramercial*, in that its ordered combination of eight steps recites a computer-implemented method for sending an ad to a user in order to elicit feedback, then displaying the ad, by itself or in conjunction with the user’s feedback, and determining the effect, if any, of the feedback on the ad’s effectiveness. The *Ultramercial* court held that claim 1 there was “directed to an abstract idea, which is . . . a method of using advertising as an exchange or currency.” *Id.* Similarly here, instant claim 1 recites the abstract idea of measuring the effect of word-of-mouth on the effectiveness of an advertising campaign.

The Specification confirms that the purpose of the claimed method is “to measure the impact of features available in a social network system on the effectiveness of an advertisement.” Spec. ¶ 53. The Specification describes the reasons for measuring advertising effectiveness: “[T]o improve the generation, distribution and relevance of content generated based on online advertisements” and to allow social networking systems to “attract more advertising revenue.” *Id.*

Thus, we agree with the Examiner that claim 1 recites an abstract idea: both the mental step of “receiving an interaction from the subject user” and the process as a whole, which is among the “methods of organizing human activity”—specifically, commercial interactions such as advertising activities—that have been recognized as abstract ideas. *See* 84 Fed. Reg. at 52.

*Revised Guidance Step 2(A), Prong 2*

Although claim 1 recites an abstract idea, it would still be patent-eligible if “the claim as a whole integrates the recited judicial exception into a practical application of the exception”; i.e., if the claim “appl[ies], rel[ies] on, or use[s] the judicial exception in a manner that imposes a meaningful limit on the judicial exception.” 84 Fed. Reg. at 54. This analysis includes “[i]dentifying whether there are any additional elements recited in the claim beyond the judicial exception(s)” and “evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application.” *Id.* at 54–55. One of the “examples in which a judicial exception has not been integrated into a practical application” is when “[a]n additional element . . . merely includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea.” *Id.* at 55.

Here, we agree with the Examiner that the steps of claim 1 are drawn to what the courts have recognized to be computer functions that are well-understood, routine, and conventional functions including: receiving input and presenting information including “receiving a request”, “sending for presentation, the advertisement”, “providing a question”, “receiving a response”, “determining, by a computer processor, a measure of effectiveness” and “sending the secondary content”.

Non-Final Action 4.

Claim 1 itself requires only a generic “online system” and “computer processor” to carry out the recited functions; it does not recite any specific hardware or software configuration. Consistent with claim 1, the Specification does not describe the claimed method as requiring any unconventional computer functionality. For example, the Specification states

that “[i]n one embodiment, the online system 100 is a social networking system; in another embodiment, the online system 100 is an e-commerce system.” Spec. ¶ 26.

The Specification states that system 100 includes component modules, which “refers to computational logic for providing the specified functionality.” *Id.* ¶ 28. “The modules of the system 100 include an advertising campaign store 120, a member profile store 125, an advertisement selector 130, an advertisement queue store 135, an advertisement server 140, an event logger 145, an event log 150, a poll manager 155, a poll results store 160, and a poll analyzer 165.” *Id.* ¶ 29. The Specification describes in more detail the functions carried out by these modules, but does not provide any specific computational logic for providing those functions. *See id.* ¶¶ 30–37.

Thus, the claimed method does not use the recited abstract idea in conjunction with a particular machine or manufacture, but instead simply “includes instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea.” 84 Fed. Reg. at 55. Because claim 1 recites an abstract idea and does not integrate the abstract idea into a practical application, it is directed to an abstract idea.

*Revised Guidance Step 2(B)*

Finally, the Revised Guidance directs us to consider whether claim 1 includes “additional elements . . . [that] provide[] ‘significantly more’ than the recited judicial exception.” 84 Fed. Reg. at 56. The Revised Guidance states that an additional element that “simply appends well-understood, routine, conventional activities previously known in the industry, specified

at a high level of generality, to the judicial exception, . . . is indicative that an inventive concept may not be present.” *Id.*

Here, as discussed above, claim 1 recites the abstract idea of measuring the impact of word-of-mouth on an advertisement’s effectiveness, and includes only routine and conventional computer functions, recited at a high level of generality, to implement that idea. And, as also discussed above, claim 1 does not recite, and the Specification does not describe, any unconventional computer hardware or software as being necessary for the claimed method.

Therefore, claim 1 requires using only a generic computer system, and “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Alice*, 573 U.S. at 223. The combination of elements recited in the method of claim 1 does not amount to significantly more than the judicial exception itself, and under 35 U.S.C. § 101 the claimed method is ineligible for patenting.

#### *Appellant’s Arguments*

Appellant argues that “[t]he claims include additional limitations . . . which together amount to significantly more than the alleged abstract idea at least for the reason that a specific computer is needed to implement the determination of measure of effectiveness.” Appeal Br. 9. Appellant argues that the method of claim 1 “is a technologically complex process that needs a specific computer that can process information received from users from the control set and from users from the sample set to determine the measure of effectiveness of a communication mechanism of the online system.” *Id.*

This argument is unpersuasive. As discussed above, the Specification does not describe any unconventional computer hardware or software

needed to carry out the claimed process. Rather, claim 1 requires only a general purpose computer carrying out routine computer functions such as storing data (“maintaining an account”), transmitting and receiving data (“sending an advertisement,” “providing the secondary content,” “receiving an interaction”), recording user interactions (“generating secondary content describing [a] subject user’s interaction”), and comparing values of data (“determining . . . a measure of effectiveness”).

A general purpose computer does not become a specific machine merely because it has been programmed to carry out routine computer functions in a certain sequence. *See Ultramercial*, 772 F.3d at 716–717:

The claims . . . are not tied to any particular novel machine or apparatus, only a general purpose computer. As we have previously held, the Internet is not sufficient to save the patent under the machine prong of the machine-or-transformation test. *CyberSource*, 654 F.3d at 1370. It is a ubiquitous information-transmitting medium, not a novel machine. And adding a computer to otherwise conventional steps does not make an invention patent-eligible. *Alice*, 134 S.Ct. at 2357. Any transformation from the use of computers or the transfer of content between computers is merely what computers do and does not change the analysis.

Thus, the recitation in claim 1 of carrying out the claimed method using “an online system” and “a computer processor” is not sufficient to make the claim patent-eligible.

Appellant argues that the claims here are similar to those at issue in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), because “the claimed invention of the present application concerns effectiveness of communication mechanism of an online system in enhancing the impact of the online advertising campaign by sending

secondary content to users of the online system.” Appeal Br. 10. Appellant argues that “the claimed invention concerns a mechanism that is firmly rooted in technology and overcomes a problem specifically arising in the realm of communications via computer networks.” *Id.* at 11.

This argument is not persuasive. The problem addressed in *DDR Holdings* was that “visitors would be taken to [a] third-party merchant’s website when they clicked on the merchant’s advertisement on the host site.” 773 F.3d at 1248. The solution in *DDR Holdings* was “a composite web page that displays product information from the third-party merchant, but retains the host website’s ‘look and feel.’” *Id.* at 1248–49.

The *DDR Holdings* court concluded that the claims in that case addressed “a problem specifically arising in the realm of computer networks,” by ensuring that “upon the click of an advertisement for a third-party product displayed on a host’s website, the visitor is no longer transported to the third party’s website.” *Id.* at 1257. The court considered the somewhat analogous concept of a “warehouse store that contains a kiosk for selling a third-party partner’s cruise vacation packages.” *Id.* at 1258. The court considered that pre-Internet analog to be inapplicable, however, because

[t]here is . . . no possibility that by walking up to this kiosk, the customer will be suddenly and completely transported outside the warehouse store and relocated to a separate physical venue associated with the third-party—the analog of what ordinarily occurs in “cyberspace” after the simple click of a hyperlink.

*Id.*

Here, by contrast, the problem solved is not one that is unique to computer networks or the Internet. Rather, “the traditional analog would be,

enhancement of impact of an advertising campaign via word of mouth.”  
Appeal Br. 10. That is, the “secondary content” recited in the claims is the online equivalent to a person recommending (or denigrating) a product or an advertising campaign during a face-to-face conversation. The claimed method seeks to measure the effectiveness of such online word of mouth in enhancing the impact of online advertising, but that problem is also faced by advertisers using non-Internet media.

Appellant argues that “there is no effective mechanism to monitor word of mouth dissemination of information, whereas the online system can accurately monitor distribution of secondary content.” Appeal Br. 11. Appellant also argues that “there would be no motivation to measure effectiveness of impact of word of mouth spreading of information since it cannot be controlled.” *Id.*

Appellant, however, cites no evidence to show that advertisers lack any effective way to gauge the impact of word of mouth on an advertising campaign that is conducted using non-Internet media. Nor does Appellant cite any evidence showing that advertisers using non-Internet media would not be motivated to try to determine what impact word of mouth is having on their advertising campaign. Both of these positions seem contrary to the background discussion in Appellant’s Specification, which states that advertisers are interested in measuring the effectiveness of their ads in order to understand return on investment and, if necessary, adjust marketing strategies. Spec. ¶ 3.

The Specification also states that advertisers can measure the effectiveness of an advertising campaign by rolling it out in one city but not

in another (control) city, or by using focus groups or marketing tests with well-defined control and test populations, although these methods have limitations. *Id.* at ¶¶ 3–4. The Specification states that “[b]oth traditional and online specific methods for measuring the effectiveness of advertising campaigns have limitation[s]. . . . Therefore, existing traditional and online-specific methods of measuring the effectiveness of online advertisements can still be improved upon in terms of determining actual effectiveness.” *Id.* ¶ 5. Thus, the relevant problem arises in both the traditional and online context; the problem addressed is not unique to the Internet, as it was in *DDR Holdings*.

Finally,<sup>9</sup> Appellant argues that “the claims recite a specific arrangement of steps that evaluates the impact of online advertising campaigns directed towards members of a social networking service. The underlying improvement to computer functionality that is included in the claims is enough to deem them patent eligible, similar to [*Bascom Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (2016)].”

Appeal Br. 12. Appellant argues that “the specific ‘ordered combination’ of limitations in the present claims achieve an improvement in computer functionality by performing elements of the claimed method at a social

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<sup>9</sup> In the Reply Brief, Appellant presents an argument based on *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016). Reply Br. 5–6. However, no such argument was presented in the Appeal Brief, even though *McRO* was decided before the Appeal Brief was filed. The argument in the Reply Brief therefore is untimely, *see* 37 C.F.R. § 41.41(b)(2), and we have not considered it.

networking system coupled to a network instead of locally by a user such as organizing human activities.” *Id.*

This argument is also unpersuasive. Using a computer to carry out a series of steps for which it had not previously been used does not improve the *usefulness*, or functionality, of the computer itself. Rather, as in *SAP America, Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1169–70 (Fed. Cir. 2018), here the claim “limitations require no improved computer resources [Appellant] claims to have invented, just already available computers, with their already available basic functions, to use as tools in executing the claimed process.” The claimed method therefore does not achieve an improvement in computer functionality that would make it patent-eligible.

Claims 2–25, 49–51, and 53–66 were not argued separately and therefore fall with claim 1 for the reasons above. 37 C.F.R. § 41.37(c)(1)(iv).  
*Obviousness: Calvert, Goodman, and Konar*

The Examiner has rejected claims 1–4, 7–11, 13–18, 20–24, 53–56, 59–63, 65, and 66 as obvious in view of Calvert, Goodman, and Konar. The Examiner finds that Calvert discloses most of the limitations of claim 1. Non-Final Action 6–9. Among other things, the Examiner finds that “Calvert discloses a control group, a ‘dummy’ group, a ‘current champion strategy’ group and a test group which [is] divided into segments and further divided in groups that are given separate treatments. Here the sample set will be the segment given a first treatment. . . . [T]he control set will be the segment given a second treatment.” *Id.* at 6–7. The Examiner finds that “[t]he first treatment group (sample set) receives the advertisements to be tested as part of the proposed advertising strategy as well as an email (secondary content)

and the second treatment group (control group) receives the advertisement but the email is withheld.” *Id.* at 8.

The Examiner finds that Calvert “does not specifically disclose maintaining an account or generating secondary content based on the subject user’s interaction with the advertisement or determining a measure of effectiveness of the secondary content.” *Id.* at 9–10. The Examiner finds that Goodman discloses maintaining an account for users of an online system and generating (and sending) secondary content based on a user’s interaction with an advertisement. *Id.* at 10.

The Examiner concludes that it would have been obvious “to incorporate the account and generating content based on user and determining the effectiveness of secondary content interactions as taught by Goodman with the subsets of users and delivering content based on user interactions and determining the effectiveness of content of the invention of Calvert.” *Id.* at 11. The Examiner finds that the combination would have been obvious because (a) “both inventions teach distributing advertisements to groups of people online based on the effectiveness of the advertisement,” (b) “both inventions teach presenting advertisements based on the user[’]s interests, websites visited and the topic of the advertisement,” (c) “both inventions teach advertising based on the current activity of the user such as online chatting,” and (d) “both inventions teach determining a measure of effectiveness of content by monitoring clicks on content.” *Id.*

Further, Calvert teaches that segmenting the users within the target groups allows user segmentation that is meaningful to advertisers (see ¶0025) and Goodman teaches that propagation of user selected advertisements among users who are relatively more familiar with one another’s interests or needs can generate

more advertising revenue for both the advertiser as well as the service provider.

*Id.*

The Examiner finds Calvert and Goodman do not teach “determining an increase in awareness of the subject of advertisement among users of the online system and that the secondary content is sent in a feed.” *Id.* at 11–12. The Examiner finds that Konar teaches these limitations, and concludes that it would have been obvious to combine these features with those of Calvert and Goodman. *Id.* at 12–13.

Appellant argues, among other things, that “Calvert concerns effectiveness of internet advertisements by using a control group of users and a dummy group.” Appeal Br. 15–16. Appellant argues that Calvert does not disclose the limitation of “sending . . . the advertisement to users of the sample set as well as users of the control set,” and withholding secondary content from members of the control set but presenting the secondary content to members of the sample set. Appeal Br. 16.

Appellant argues that “Goodman concerns identifying the users that receive an advertisement based on social network of a user. This is distinct from secondary content as claimed.” *Id.* at 17. Appellant also argues that, although Goodman teaches sending a message to a second user indicating that a first user clicked on an ad, “nowhere does Goodman disclose or suggest that the message sent to the second user is a mechanism to promote the product or service or that there is a need to measure effectiveness of messages sent to other users.” *Id.* Thus, Appellant argues, “Goodman does not teach or suggest measuring effectiveness of the notification on the

advertising campaign. Accordingly, a person skilled in the art would not combine Goodman and Calvert to achieve the claimed invention.” *Id.* at 18.

We agree with Appellant that the Examiner has not persuasively shown that a skilled artisan would have found it obvious to combine the teachings of Calvert and Goodman and thereby produce the claimed method. Calvert discloses “[a] method of evaluating Internet advertisement effectiveness.” Calvert, abstract. “Internet advertisers seek to use strategies that are as cost effective as possible. This typically involves conceiving new strategies or advertising message content [and] testing them in comparison to proven strategies.” *Id.* ¶ 3.

In Calvert’s method, a user is pre-assigned to a group or to a segment of a group, which “determines the type of advertisement he is served upon a visit to a publisher site.” *Id.* ¶ 14. The “test group . . . reflects the users who are assigned to a proposed advertising strategy to be tested.” *Id.* ¶ 20. The test group is segregated into segments, and the users in each segment can receive alternative treatments. *Id.* ¶¶ 20, 23. For example,

[i]n segment three, the treatments include some common ads, and at least one ad differing between treatments. One may simply test one ad versus a second ad. Or, with the addition of other channels like email, one may assign one part of the segment to receive an email and banner advertisements, while the other receives only banners, for instance. One may also determine if integration of messaging between emails and banners improves performance relative to non-integrated communication.

*Id.* ¶ 24.

The Examiner interprets the “sample set” of claim 1 to be the members that receive an email and banner advertisements, and the “control

set” of claim 1 to be the segment members who receive the banner advertisements alone. Non-Final Action 8. The Examiner relies on Goodman to suggest modifying Calvert’s method to include a system-generated email describing a user’s interaction with an ad or an associated product or service. *Id.* at 10.

Goodman, however, does not disclose a method of determining the relative effectiveness of different advertising campaigns. Rather, Goodman relates to “targeted advertising at least in part by propagating selected advertisements from one user to at least a subset of the user’s social network.” Goodman ¶ 1.

For example, when a user is presented with an advertisement and then clicks on the advertisement to obtain more information about the product or service being advertised, the act of clicking on the advertisement can cause it to be sent to one or more other users for their viewing. The other users may be part of the first user’s social network and/or may be actively or currently communicating with the first user such as by way of a chat, game, or instant messaging service.

*Id.* ¶ 4.

In one embodiment of Goodman’s method, “[a]n advertisement click monitor 220 can watch activity associated with the advertisements and track which of them have been clicked on by at least a first user.” *Id.* ¶ 30. “When one user has clicked on the advertisement, a notification component 240 can notify at least a second user of the first user’s click such as by showing the clicked-on advertisement to the second user or by sending the second user a message . . . [or] the advertisement may flash on the second user’s display.” *Id.*

Thus, Goodman describes its method as useful in distributing a given advertisement among members of a particular social network; i.e., to “facilitate propagating selected advertisements among users within a social network.” *Id.* ¶ 4. Goodman does not suggest comparing the effectiveness of a given ad, by itself, with its effectiveness if paired with a message indicating that another user had clicked on it.

For its part, Calvert does not suggest basing its groups or segments on social networks, nor does it suggest modifying the advertising strategies being tested based on other users’ interactions with particular ads. Therefore, Calvert and Goodman do not reasonably suggest modifying Calvert’s advertising evaluation method to include an email (secondary content) that describes a subject user’s interaction with an advertisement or associated with the advertised product or service.

As noted above, the Examiner relies on Konar for its disclosure of sending secondary content in a feed. Non-Final Action 11–12. We therefore conclude that the teachings Calvert, Goodman, and Konar, when considered without the benefit of hindsight, would not have provided a skilled artisan with adequate reason to combine the relevant teachings of each reference in the way required by the claims on appeal.

*Obviousness: Calvert, Goodman, and Konar, in view of Abraham, Briggs, or Kendall*

The Examiner has rejected dependent claims 5, 6, 12, 19, 25, 49–51, 57, 58, and 64 as obvious based on Calvert, Goodman, and Konar, further combined with one of Abraham, Briggs, or Kendall. The Examiner, however, does not point to any disclosures in Abraham, Briggs, or Kendall that make up for the deficiency discussed above with regard to Calvert and Goodman.

See Non-Final Action 21–28. We therefore reverse the rejections based on Calvert, Goodman, and Konar, further combined with one of Abraham, Briggs, or Kendall for the reasons discussed above.

### DECISION SUMMARY

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1–25, 49–51, 53–66	101	Eligibility	1–25, 49–51, 53–66	
1–4, 7–11, 13–18, 20–24, 53–56, 59–63, 65, 66	103(a)	Calvert, Goodman, Konar		1–4, 7–11, 13–18, 20–24, 53–56, 59–63, 65, 66
5, 6, 19, 57, 58	103(a)	Calvert, Goodman, Konar, Abraham		5, 6, 19, 57, 58
12, 25, 64	103(a)	Calvert, Goodman, Konar, Briggs		12, 25, 64
49–51	103(a)	Calvert, Goodman, Konar, Kendall		49–51
<b>Overall Outcome</b>			1–25, 49–51, 53–66	

### TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED