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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ANDREW E. LEVI and BRADLEY W. BAUER

Appeal 2018-004471
Application 14/573,634
Technology Center 3600

Before PHILIP J. HOFFMANN, CYNTHIA L. MURPHY, and
TARA L. HUTCHINGS, *Administrative Patent Judges*.

Opinion for the Board filed by *Administrative Patent Judge*
CYNTHIA L. MURPHY.

Opinion Dissenting filed by *Administrative Patent Judge*
TARA L. HUTCHINGS.

MURPHY, *Administrative Patent Judge*.

DECISION ON APPEAL

The Appellant¹ appeals the Examiner's rejection of claims 1–14, 31,
and 32 under 35 U.S.C. § 101. We REVERSE.²

¹ The Appellant is the “applicant” as defined by 37 C.F.R. § 1.42 (e.g., “the inventor or all of the joint inventors”). “The real party in interest is Blue Calypso, LLC.” (Appeal Br. 2.)

² We have jurisdiction over this appeal under 35 U.S.C. §§ 6(b) and 134(a).

BACKGROUND

The Appellant provides a method “for providing direct advertising between peer-to-peer communication devices,” namely between the communication device of a “subscriber” and the communication device of a “recipient” who has a relationship with this subscriber. (Spec. ¶ 57.)³

With the Appellant’s method, the subscriber agrees to promote the products/services of an advertiser, and, per this agreement, the subscriber’s communications to his/her peer recipients include advertisements promoting these products/services. (See Spec. ¶¶ 67–72.) When a communication from the subscriber reaches a recipient’s device, “[an] advertisement is displayed, played, or confirmed” by the recipient. (*Id.* ¶ 74.) If the advertisement includes a “link” to the advertiser’s website, the recipient may “click on” this link at the end of the communication session. (*Id.*)

For each advertisement (e.g., endorsement) sent, software residing on the subscriber’s device “creates a unique identifier” containing “a hash of three separate codes,” namely an “[e]ndorsement code,” a “[s]ource code,” and “contact code.” (Spec. ¶ 109.) In other words, there is a hashing of an endorsement code, a source code, and a contact code to form a unique identifier that is included in the communication sent to the recipient’s device. According to the Appellant, “without the unique identifier,” there would “not be a way for the destination communication device to identify, provide, or store information related to the endorsement, source, or contact.” (Appeal Br. 27.)

³ “Examples of peer-to-peer communication devices include cellular phones, personal digital assistants (PDA), personal computers, instant messaging devices, and audio devices.” (Spec. ¶ 56.)

ILLUSTRATIVE CLAIM

1. A method for targeted distribution of promotional information relating to one or more product or service promotions by one or more advertisers, the distribution being first to one or more source communication devices associated respectively with one or more qualified subscribers and thereafter from the one or more source communication devices to one or more destination communication devices associated respectively with one or more recipients having relationships with a qualified subscriber from whom the information was received, wherein an intermediary between the one or more advertisers and the one or more qualified subscribers comprises a server, the method comprising the steps of:
 - a. obtaining, at the intermediary, from at least one advertiser, a first profile including demographic data desired by the advertiser;
 - b. obtaining, at the intermediary, from at least one source communication device, a second profile including demographic data relating to a subscriber;
 - c. deriving, at the intermediary, a match condition between the first profile and the second profile, thereby qualifying the subscriber for the receipt of the promotional information and determining a matched advertiser;
 - d. upon qualifying the subscriber, communicating from the intermediary to a source communication device associated with the qualified subscriber, first product or service information relating to one or more promotions by the matched advertiser;
 - e. after communicating the first product or service information to the source communication device associated with the qualified subscriber, receiving, at the intermediary, an express selection by the qualified subscriber of at least one selected promotion of the one or more promotions;
 - f. subsequent to the step of receiving the express selection, transmitting from the intermediary to the source communication device, second information for creating a content communication, related to the at least one selected promotion, that can be sent from the source communication

device to the one or more destination communication devices respectively associated with one or more recipients, the second information including at least an executable link for providing the one or more recipients access to third information relating to at least one of the group of the matched advertiser and the at least one selected promotion; and,

g. hashing an endorsement code, a source code, and a contact code to form a unique identifier that is included in the content communication sent to the destination device.

REJECTION

The Examiner rejects claims 1–14, 31, and 32 under 35 U.S.C. § 101 as being directed to a judicial exception (i.e., an abstract idea) without significantly more. (Final Action 2.)

JUDICIAL EXCEPTIONS

The Patent Act defines subject matter eligible for patent protection as “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” (35 U.S.C. § 101.) However, the Supreme Court has “long held” that this provision contains an important implicit exception: “[l]aws of nature, natural phenomena, and abstract ideas are not patentable.” (*Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013).) These three concerns are “judicially created exceptions to § 101,” or more concisely, “judicial exception[s].” (*McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1311–12 (Fed. Cir. 2016).) Thus, an abstract idea is a judicial exception to subject matter (e.g., a method) that otherwise falls within a category listed in the statute.

THE ALICE TEST

In *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208 (2014), the Supreme Court provided a two-step test to guard against an attempt to patent a purely an abstract idea. (*Alice*, 573 U.S. at 217–18.) In *Alice* step one, a determination is made as to whether the claim at issue is “directed to” an abstract idea. (*Id.* at 218.) If a claim is “not directed to an abstract idea under step one of the *Alice* [test], we do not need to proceed to step two.” (*Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1339 (Fed. Cir. 2016).) More succinctly, “we stop at [*Alice*] step one.” (*Id.*)

Thus, if a claim is not “directed to” an abstract idea so as to satisfy *Alice* step one, the *Alice* test for patent eligibility is complete, and the claim passes muster under 35 U.S.C. § 101.⁴

2019 § 101 GUIDANCE

The 2019 Revised Patent Subject Matter Eligibility Guidance (“2019 § 101 Guidance”) provides us with a two-pronged step (Step 2A) for analyzing whether a claim is “directed to” an abstract idea so as to satisfy *Alice* step one. (*See* Federal Register Vol. 84, No. 4, 50 (Jan. 7, 2019).) In the first prong of Step 2A (Prong One), we determine whether the claim recites a judicial exception; and, in the second prong of Step 2A (Prong Two), we determine whether the judicial exception is integrated into a

⁴ If the claim at issue is directed to an abstract idea so as to satisfy *Alice* step one, the second step of the *Alice* test must be performed. In *Alice* step two, a determination is made as to whether additional elements in the claim “amount[] to significantly more” than the abstract idea itself. (*Alice*, 573 U.S. at 218.) This determination involves evaluating whether these additional elements are well-understood, routine, and/or conventional functions, individually, or as an ordered combination. (*Id.* at 225.)

practical application of the judicial exception.” (*Id.* at 50.) “If the recited exception is integrated into a practical application of the exception, then the claim is eligible at Prong Two” and “[t]his concludes the eligibility analysis.” (*Id.* at 54.)

Thus, if a claim integrates an abstract idea into a practical application under Prong Two of Step 2A, the *Alice* test for patent eligibility is complete, and the claim passes muster under 35 U.S.C. § 101.⁵

ANALYSIS

The Examiner’s rejection is premised upon independent claim 1 being “directed to” an abstract idea (e.g., “advertising”), and, therefore, satisfying the first step of the *Alice* test. (Final Action 2.) The Appellant argues that the Examiner does not sufficiently establish that claim 1 is directed to an abstract idea. (*See* Appeal Br. 13–23.) We agree with the Appellant that the Examiner does not adequately explain, on the record before us, why claim 1 is “directed to” an abstract idea so as to satisfy *Alice* step one.

Per the 2019 § 101 Guidance, we begin our *Alice*-step-one analysis by determining whether independent claim 1 “recites” an abstract idea under Prong One of Step 2A. (2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 54.) The Guidance “extracts and synthesizes key concepts identified by the courts as abstract ideas,” and these concepts include “[c]ertain methods of organizing human activity,” and, more particularly,

⁵ If it is determined under Step 2A that the claim at issue is directed to an abstract idea, Step 2B of the 2019 § 101 Guidance must be performed. In Step 2B attention is given, for the first time, as to whether additional elements in the claim are well-understood, conventional and/or routine. (*See* 2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 56.)

“commercial” interactions, and, even more particularly, “advertising.” (*Id.* at 52.) For example, in *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363 (Fed. Cir. 2015), the Federal Circuit held that “tailoring information” presented in an advertisement (i.e., a targeted-advertising strategy) is “an abstract, overly broad concept long-practiced in our society.” (*Intellectual Ventures*, 792 F.3d at 1370.)⁶

Independent claim 1 sets forth “[a] method for targeted distribution of promotional information relating to one or more product or service promotions by one or more advertisers.” (Appeal Br., Claims App.) The claimed method comprises steps (a)–(f), which involve an “advertiser[,]” a “qualified subscriber[,]” and “recipients having relationships with [the] qualified subscriber.” (*Id.*)

More specifically, step (a) recites obtaining “a first profile including demographic data desired by the advertiser,” step (b) recites obtaining “a second profile including demographic data relating to [the] subscriber,” and step (c) recites deriving “a match condition between the first profile and the second profile.” (Appeal Br., Claims App.) Thus, claim 1 recites using data to match an advertiser with someone who aligns with the advertiser’s desired target audience, which is the hallmark of a targeted-advertising strategy.

Step (c) also recites that the “match condition” qualifies the subscriber “for the receipt of the promotional information,” step (d) recites

⁶ See also, e.g., *Morsa v. Facebook, Inc.*, 77 F. Supp. 3d 1007, 1013–14 (C.D. Cal. 2014), *aff’d*, 622 F. App’x 915 (Fed. Cir. 2015) (“[T]argeted advertising is [a well-known] concept, insofar as matching consumers with a given product or service ‘has been practiced as long as markets have been in operation.’”)

communicating, to this qualified subscriber, “first product or service information relating to one or more promotions by the matched advertiser,” and step (e) recites receiving, at the intermediary, “an express selection by the qualified subscriber of at least one selected promotion of the one or more promotions.” (Appeal Br., Claims App.) Thus, claim 1 recites that the advertiser sends product/service information to the subscriber, who then selects the promotion(s) he/she is willing to promote. Product/service information, promotions related to these products/services, and a party willing to convey these promotions, are constituents of almost any targeted-advertising strategy.

Step (f) recites transmitting, to the matched subscriber, “information for creating a content communication” related to the selected promotion(s), which can be sent from the subscriber to the “recipients” (i.e., to their communication devices) having relationships with the subscriber. (Appeal Br., Claims App.) Thus, claim 1 recites that a “content communication,” related to the promotional products/services, is created. The creation of advertisement “content” is a necessary step in any targeted-advertising strategy—otherwise there would be no advertisement to target towards the demographically-desired audience.

As such, independent claim 1 recites, in steps (a)–(f), information (e.g., demographic data, product/service promotions, advertisement content, etc.) and functions (e.g., data matching, promotion selecting, and content creating) that would be innate in any targeted-advertising strategy. Targeted advertising is a commercial interaction, and, therefore, a certain method organizing human activity that constitutes an abstract idea. (*See* 2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 52.)

Thus, independent claim 1 recites an abstract idea under Prong One of Step 2A of the 2019 § 101 Guidance. However, this alone does not mean that claim 1 is “directed to” this abstract idea so as to satisfy *Alice* step one. We must further determine, under Prong Two of Step 2A of the Guidance, “whether the claim as a whole integrates the recited judicial exception into a practical application of the exception.” (2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 54.)

When doing this Prong-Two determination, we identify “whether there are any additional elements recited in the claim beyond the judicial exception[],” and we then evaluate “those additional elements individually and in combination to determine whether they integrate the exception into a practical application.” (2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 54–55.) Thus, if independent claim 1 recites a “step[]” that is “beyond” those prevalent in a targeted-advertising strategy (*id.* at 55 n.24), there should be a discussion, on the record, explaining why this step does not integrate the abstract idea into a practical application.

Independent claim 1 recites, along with steps (a)–(f), a step (g) which requires “hashing an endorsement code, a source code, and a contact code to form a unique identifier that is included in the content communication sent to the destination device.” (Appeal Br., Claims App.)

The Examiner maintains that “hashing” is “a fundamental economic practice” and is “similar to the concept of hedging claimed in *Bilski*.” (Final Action 5–6; *see also Bilski v. Kappos*, 561 U.S. 953 (2010).) Insofar as the Examiner is saying that the recited hashing step is a fundamental economic aspect of targeted advertising, we disagree. Although targeted advertising, as a “broad concept,” has been “long practiced in our society” (*Intellectual*

Ventures, 792 F.3d at 1370), “hashing an endorsement code, a source code, and a contact code to form a unique identifier” has not been historically part of this or any other fundamental economic practice.

The Examiner maintains that “hashing” is “known in the art,” and “a hash identifier is a generic and routine concept.” (Answer 9.) As correctly pointed out by the Examiner, the Specification describes the unique identifier as being “created by combining several separate codes together in any one of many encryption routines (known in the art as ‘hashing’) to form a code that is unique for each endorsement sent by a subscriber.” (Spec. ¶ 109.) But insofar as the Examiner is saying that an additional element in a claim cannot integrate an abstract idea into a practical application if it is well-understood, routine, or conventional, this is contrary to the Guidance.⁷ The Prong-Two determination “specifically excludes consideration” of whether an additional element is “well-understood,” “routine,” and/or “conventional.” (2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 55.)⁸

The Examiner maintains that hashing step (g) amounts to “comparing new and stored information and using rules to identify options,” “using categories to organize, store and transmit information,” and/or “data recognition and storage.” (Final Action 6.) Insofar as the Examiner is

⁷ An application a judicial exception (e.g., an abstract idea) “to a known structure or process may well be deserving of patent protection.” (*Diamond v. Diehr*, 450 U.S. 175, 187 (1981); *see also Bilski*, 561 U.S. at 611.)

⁸ The “analysis of well-understood, routine, conventional activity is done in Step 2B.” (2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 55.) As indicated above, Step 2B need not be performed if it is not established that a claim is directed to an abstract idea under Step 2A.

saying that a data-processing step, in and of itself, is an abstract idea, this is also contrary to the Guidance. Although the Federal Circuit has held that data-processing steps can sometimes equate to “abstract-idea processes,” this is only when they are “essentially mental processes,” or, in other words, they cannot be distinguished from “ordinary mental processes.” (*Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354–55 (Fed. Cir. 2016).) Here, there is nothing in the record reflecting that the Examiner considers “hashing” to be a “mental” process that can be “performed in the human mind.” (2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 52.) And “claims directed to software” are not “inherently abstract.” (*Enfish*, 822 F.3d at 1335.)

Consequently, the Examiner does not adequately explain why hashing step (g) fails to integrate the recited abstract idea, namely targeted advertising, into a practical application.⁹ Thus, the Examiner fails to establish, on the record before, that independent claim 1 is “directed to” an abstract idea so as to satisfy *Alice* step one. As such, there is no need to perform Step 2B of the 2019 § 101 Guidance (or *Alice* step two), and “this concludes the eligibility analysis.” (2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 54.)

The rest of the claims on appeal likewise require the “hashing” of “an endorsement code, a source code, and a contact code to form a unique

⁹ Moreover, although “[s]ome elements may be enough on their own to meaningfully limit an exception,” it is often “the combination of elements that provide the practical application.” (*See* 2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 55.) As such, “examiners should give careful consideration to both the element and how it is used or arranged in the claim as a whole.” (*Id.*)

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identifier” (Appeal Br., Claims App.); and the Examiner’s determinations with respect to those claims do not compensate for the above-discussed shortcoming in the rejection of independent claim 1 (*see* Final Action 2–5).

Thus, on the record before us, we cannot sustain the Examiner’s rejection of claims 1–14, 31, and 32 under 35 U.S.C. § 101.

DECISION

In summary:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1–14, 31, 32	101	Eligibility		1–14, 31, 32

REVERSED

HUTCHINGS, *Administrative Patent Judge*, dissenting.

I respectfully dissent from the Majority’s decision to reverse the Examiner’s rejection of claims 1–14, 31, and 32 under 35 U.S.C. § 101.

Appellant argues the claims as a group. (Appeal Br. 12–31.) I select independent claim 1 as representative. Claims 2–14, 31, and 32 stand or fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

In rejecting the claims under 35 U.S.C. § 101, the Examiner determined that the claims are directed to “the concept of displaying company approve[d] content, [and] advertising impressions that provide brand awareness,” which the Examiner concluded is similar to other concepts that the courts have held abstract. (Final Action 3.) The Examiner also determined that the “claims detail steps toward targeting promotion to recipients,” which the Examiner characterized as a fundamental economic practice and, thus, an abstract idea. (*Id.* at 4.) The Examiner also determined that the claims do not include additional elements or a combination of elements sufficient to amount to significantly more than the abstract idea itself. (*Id.* at 4–5.)

*Step One of the Mayo*¹⁰/*Alice Framework (2019 § 101 Guidance, Step 2A, Prong 1)*

I am not persuaded by Appellant’s arguments that the Examiner does not fairly or accurately characterize the claimed invention (Appeal Br. 15), or that the Examiner characterizes the claims at too high a level of abstraction (*id.*). That the claims include more words than the phrase the

¹⁰ *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66 (2012).

Examiner used to articulate the abstract idea, and that the Examiner, thus, articulates the abstract idea at a higher level of abstraction than would Appellant, is an insufficient basis to persuasively argue either that the claim language has been mischaracterized or that the Examiner has failed to consider the claims as a whole. (*Cf. Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240–42 (Fed. Cir. 2016) (“An abstract idea can generally be described at different levels of abstraction. As the Board has done, the claimed abstract idea could be described as generating menus on a computer, or generating a second menu from a first menu and sending the second menu to another location. It could be described in other ways, including, as indicated in the specification, taking orders from restaurant customers on a computer.”).)

I also am not persuaded that the Examiner failed to rely on case law that supports the rejection, or that the Examiner otherwise erred in determining that the claims are directed to an abstract idea. (Appeal Br. 16–23.) The Federal Circuit has explained that “the ‘directed to’ inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether ‘their character as a whole is directed to excluded subject matter.’” (*Enfish*, 822 F.3d at 1335 (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015))).) It asks whether the focus of the claims is on a specific improvement in relevant technology or on a process that itself qualifies as an “abstract idea” for which computers are invoked merely as a tool. (*See id.* at 1335–36.) Here, it is clear from the Specification, including the claim language, that Appellant’s claims focus on an abstract idea, and not on any improvement to technology and/or a technical field.

The Specification is titled “System and Method for Distribution of Targeted Content between Mobile Communication Devices,” and describes in the Background section that advertisers are highly motivated to identify new methods of creating brand awareness to users. (Spec. ¶ 2.) The ability of advertisers to reach users using traditional broadcast advertising medium is declining. (*Id.* ¶ 4.) For example, users may skip undesirable advertisements using digital video recorders, or consume media without the disruption of commercials using satellite radio. (*Id.* ¶ 3.) The Background section, thus, concludes that “a need exists for a method that offers more frequent and effective direct advertising to peer-to-peer users.” (*Id.* ¶ 4.)

The claimed invention is ostensibly intended to address this need, i.e., to provide “direct advertising between peer-to-peer communication devices.” (*Id.* ¶ 57.) Claim 1, thus, recites a “method for targeted distribution of promotional information relating to one or more product or service promotions by one or more advertisers, the distribution being first to . . . one or more qualified subscribers and thereafter . . . to . . . one or more recipients having relationships with a qualified subscriber from whom the information was received.” The method recites the following steps:

- a. *obtaining, at the intermediary, from at least one advertiser, a first profile including demographic data desired by the advertiser;*
- b. *obtaining, at the intermediary, from at least one source communication device, a second profile including demographic data relating to a subscriber;*
- c. *deriving, at the intermediary, a match condition between the first profile and the second profile, thereby qualifying the subscriber for the receipt of the promotional information and determining a matched advertiser;*
- d. *upon qualifying the subscriber, communicating from the intermediary to a source communication device*

associated with the qualified subscriber, *first product or service information relating to one or more promotions by the matched advertiser;*

e. *after communicating the first product or service information to the source communication device associated with the qualified subscriber, receiving, at the intermediary, an express selection by the qualified subscriber of at least one selected promotion of the one or more promotions;*

f. *subsequent to the step of receiving the express selection, transmitting from the intermediary to the source communication device, second information for creating a content communication, related to the at least one selected promotion, that can be sent from the source communication device to the one or more destination communication devices respectively associated with one or more recipients, the second information including at least an executable link for providing the one or more recipients access to third information relating to at least one of the group of the matched advertiser and the at least one selected promotion; and,*

g. *hashing an endorsement code, a source code, and a contact code to form a unique identifier that is included in the content communication sent to the destination [communication] device.*

(Appeal Br., Claims App. (emphases added).) Thus, the italicized portions of claim 1 recite receiving data (i.e., a first profile desired by an advertiser and a second profile of a subscriber) (steps (a) and (b)); processing data to determine a match between a subscriber (i.e., the second profile) and an advertiser (i.e., the first profile) (step (c)); transmitting data (i.e., promotions by the matched advertiser to the subscriber) (step (d)); receiving data (i.e., a selection by the subscriber of a promotion) (step (e)); transmitting data from the intermediary to the subscriber to create a content communication related to the selected promotion that can be sent by the subscriber to one or more recipients (step (f)); and processing data (i.e., hashing codes to form a unique identifier) to be included in the content communication related to the

selected promotion that is to be sent by the subscriber to a recipient (step (g)). These limitations, given their broadest reasonable interpretation, recite a method for a peer-to-peer distribution of promotional information, i.e., a commercial interaction (including advertising and marketing), which is a method of organizing human activity and, therefore, an abstract idea. (*See* 2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 52.)

Step One of the Mayo/Alice Framework (2019 § 101 Guidance, Step 2A, Prong 2)

Having concluded that claim 1 recites a judicial exception, i.e., an abstract idea (Step 2A, Prong One), I next consider whether the claim recites additional elements that integrate the judicial exception into a practical application (Step 2A, Prong Two). The only additional elements recited in claim 1, beyond the abstract idea, are the elements not italicized above, i.e., a “source communication device,” a “destination communication device[,],” and an “executable link”— elements that, as the Examiner observes (Final Action 4), are recited at a high degree of generality, i.e., as generic computer components (*see, e.g.*, Spec. ¶¶ 56–59). I find no indication in the Specification that the operations recited in claim 1 require any specialized computer hardware or other inventive computer components, i.e., a particular machine, or that the claimed invention is implemented using other than generic computer components to perform generic computer functions. (*See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (“[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.”).)

I also find no indication in the Specification that the claimed invention effects a transformation or reduction of a particular article to a different state

or thing. Nor do I find anything of record that attributes an improvement in computer functionality or other technology and/or technical field to the claimed invention or that otherwise indicates that the claimed invention integrates the abstract idea into a “practical application,” as that phrase is used in the 2019 § 101 Guidance. (*See* 2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 54–55.)

Appellant argues that the claims are directed to patent eligible subject matter because they include several features that are not found in the prior art. (Appeal Br. 24.) Specifically, Appellant points out that the claims are not rejected under 35 U.S.C. §§ 102 or 103. (*Id.*) But a novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent ineligible. *See Mayo*, 566 U.S. at 90. Appellant’s claim 1 may well improve known methods of advertising, but I am not persuaded that the improvement amounts to an improvement in the functioning of a computer or to other technology or technical field (*see* 2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 55), as opposed to an improvement to a method of advertising, which is a commercial interaction (including advertising and marketing), and, thus, an abstract idea (*see id.* at 52).

Appellant argues that the claims do not preempt other approaches for displaying company approved content and advertising impressions that provide brand awareness. (Appeal Br. 24–25.) This argument also is unpersuasive. There is no dispute that the Supreme Court has described “the concern that drives [the exclusion of abstract ideas from patent-eligible subject matter] as one of pre-emption.” (*Alice*, 573 U.S. at 216.) But, characterizing preemption as a driving concern for patent eligibility is not the same as characterizing preemption as the sole test for patent eligibility.

“The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability” and “[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis.” (*Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice*, 573 U.S. at 216).) “[P]reemption may signal patent ineligible subject matter, [but] the absence of complete preemption does not demonstrate patent eligibility.” (*Id.*)

Appellant argues that the claims achieve an improved technological result, analogous to the claims in *McRO*. (Appeal Br. 25–26.) In particular, Appellant contend that the claims “require an executable link that is transmitted between devices” and “a unique identifier formed by hashing using a novel process.” (*Id.* at 25.) According to Appellant, “without the executable link . . . prior art systems (such as [a] billboard) could not provide a destination communication device [the ability] to access information relating to a matched advertiser or a selected promotion.” (*Id.*) Yet, providing an executable link for a recipient to access information relating to a matched advertiser or a selected promotion merely links the abstract idea to a particular technological environment. (*See* 2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 55 (explaining that an additional element does not integrate the abstract idea into a practical application where it generally links the use of the abstract idea to a particular technological environment or field of use).)

With respect to the unique identifier, Appellant asserts that “without the unique identifier . . . prior art systems could not provide for the destination communication device to identify, provide, or store information related to the endorsement, source, or contact.” (Appeal Br. 25.) However,

to the extent that Appellant argues that claim 1 is directed to the technical improvement of enabling the destination communication device to identify, provide, or store information related to the endorsement, source, or contact, this argument is unpersuasive *at least* because such improvement is not captured in the scope of claim 1.¹¹ Instead, claim 1 recites forming a code to be sent in a content communication to be sent to the destination communication device, but does not require any further processing of the

¹¹ Appellant's argument also is unpersuasive because Appellant does not identify, and I do not find, support in the Specification for the destination communication device performing these functions. Instead, Appellant's Specification describes that the recipient's destination communication device accepts a communication from the source containing an embedded link. (Spec. ¶ 105.) When the recipient activates the embedded link, the intermediary decodes the unique identifier (containing an endorsement code identifying the endorsement sent to the recipient, a source code identifying the source, and a contact code identifying the recipient), and the recipient is directed to advertisement data hosted by the intermediary. (*Id.* ¶¶ 106–109.) The intermediary monitors the number of endorsements sent by the subscriber and the number of recipients that use the embedded link to view the advertisement, analyzing the endorsement program. (*See id.* ¶¶ 106, 114.) Based on this analysis, the intermediary determines when a subscriber no longer qualifies for the endorsement program and notifies the advertiser. (*See id.* ¶¶ 114–116.) The advertiser decides whether to deactivate the subscriber. (*See id.* ¶¶ 114–116.) The Specification also describes that the intermediary can use its stored historical data regarding the interaction of the recipient to redirect the recipient to another advertisement than the one identified in the link. (*Id.* ¶ 108.) For example, the intermediary may redirect the destination communication device to a different link if the recipient previously accepted an offer associated with the link. (*Id.*) Thus, the Specification describes the intermediary using the unique identifier to store and analyze data to improve advertising effectiveness. But this additional functionality — performed by the intermediary and not recited in claim 1 — relates to an improvement to the abstract idea, not a technological improvement.

unique code by the destination communication device or the intermediary. (*See Berkheimer v. HP Inc.*, 881 F.3d 1360, 1370 (Fed. Cir. 2018) (holding that claims 1–3 and 9 were ineligible because they “do not capture the purportedly inventive concepts[;]” whereas, claims 4–7 “contain limitations directed to the arguably unconventional inventive concept described in the specification[.]” rendering summary judgement of claims 4–7 improper), *cert. denied*, 2020 WL 129532 (U.S. Jan. 13, 2020); *see also Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1322 (Fed. Cir. 2016) (“The district court erred in relying on technological details set forth in the patent’s specification and not set forth in the claims to find an inventive concept.”).)

Step (g) of claim 1 recites “hashing an endorsement code, a source code, and a contact code to form a unique identifier that is included in the content communication sent to the destination [communication] device.” Appellant does not identify, and I do not find, any portion of the Specification that describes a particular manner of hashing or otherwise indicates an improvement to technology. Instead, the Specification describes at paragraph 109 that “[t]he unique identifier 930 is created by combining several separate codes together in any one of many encryption routines (known in the art as ‘hashing’) to form a code that is unique for each endorsement sent by a subscriber.” Thus, the claimed step of “hashing” is no more than encoding an endorsement code, a source code, and a contact code, in any manner, to form a unique identifier that is included in the content communication.

This concept is similar to concepts that the Federal Circuit has held to be an abstract concept. For example, in *RecogniCorp, LLC v. Nintendo Co.*,

855 F.3d 1322, 1326 (Fed. Cir. 2017), the Federal Circuit determined that “claim 1 is directed to the abstract idea of encoding and decoding image data.” There, the court held that the claimed method “reflects standard encoding and decoding, an abstract concept long utilized to transmit information. *Cf. Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340–41 (Fed. Cir. 2017) (organizing, displaying, and manipulating data encoded for human- and machine-readability is directed to an abstract concept).

Drawing an analogy to the claims in *Digitech Image Technologies, LLC v. Electronics for Imaging, Inc.*, 758 F.3d 1344 (Fed. Cir. 2014), the Federal Circuit in *RecogniCorp* expounded that in *Digitech*

[w]e explained that the claim at issue “recites a process of taking two data sets and combining them into a single data set” simply by organizing existing data into a new form. [*Digitech Image Techs.*, 758 F.3d] at 1351. A process that started with data, added an algorithm, and ended with a new form of data was directed to an abstract idea. *Id.* In this case, the ’303 patent claims a method whereby a user starts with data, codes that data using “at least one multiplication operation,” and ends with a new form of data. We discern no material difference between the *Alice* step one analysis in *Digitech* and the analysis here.

(*RecogniCorp*, 855 F.3d at 1327.) Like the process claims in *Digitech*, Appellant’s limitation (g) of claim 1 starts with data (three codes), adds an algorithm (hashing), and ends with a new form of data (a unique identifier). And like claim 1 of *RecogniCorp*, Appellant’s limitation (g) of claim 1 recites hashing, i.e., standard encoding, which is an abstract concept long utilized to transmit information.

Appellant’s hashing limitation is also similar to the claims at issue in *Secured Mail Solutions LLC v. Universal Wilde, Inc.*, 873 F.3d 905, 910

(Fed. Cir. 2017). There, the Federal Circuit held that the claims at issue “generically provide for the encoding of various data onto a mail object but do not set out how this is to be performed.” The Federal Circuit pointed out that “[t]here is no description of how the unique identifier is generated or how a unique identifier is different from a personal name, or return address.” *Secured Mail Sols.*, 873 F.3d at 910. Here, Appellant’s claim 1, like the claims at issue in *Secured Mail Solutions*, is not directed to the specific details for generating or processing the unique code to indicate any improvement to technology and/or technical field, but instead generically provides for hashing (i.e., encoding) various data.

I also do not see any parallel between the specific set of rules described in *McRO* that result in an improvement to technology in 3-D animation techniques, and the result-based, functional limitations recited in Appellant’s claim 1. (*See* Appeal Br. 25–26.) In *McRO*, an improvement in computer animation was realized by using “rules, rather than artists [i.e., human animators], to set the morph weights and transitions between phonemes” (*McRO*, 837 F.3d at 1313), i.e., in *McRO*, the invention used “rules to automatically set a keyframe at the correct point to depict more realistic speech, achieving results similar to those previously achieved manually by animators” (*id.* at 1307). The Federal Circuit found that the claimed rules allowed the computer to produce accurate and realistic synchronization and facial expressions in animated characters that previously could only be produced by human animators. (*Id.* at 1313.)

Here, claim 1 does not recite a specific set of rules that results in an improvement to technology analogous to the claims in *McRO*. Instead, claim 1 recites results-based rules for each of limitations (a) through (g),

without providing sufficient technological details for how to achieve the desired results. *See Intellectual Ventures*, 850 F.3d at 1342 (explaining that “[o]ur law demands more” than claim language that “provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it”). For example, limitation (f) recites “transmitting from the intermediary to the source communication device, second information for creating a content communication . . . , the second information including at least an executable link for providing the one or more recipients access to third information relating to at least one of the group of the matched advertiser and the at least one selected promotion.” No particular manner for transmitting the executable link is recited in claim 1 that would indicate any improvement in technology. Likewise, limitation (g) recites “hashing an endorsement code, a source code, and a contact code to form a unique identifier that is included in the content communication.” As described above, no particular manner for hashing the codes is recited in claim 1 that would indicate any improvement in technology. Moreover, Appellant does not identify, and I do not find, any portion of the Specification that describes a particular manner of transmitting an executable link, hashing codes, or otherwise indicates an improvement to technology. The same holds true for the other recited limitations.

Appellant further argues that limitations (a) through (g) of claim 1, “taken as an ordered combination, improve the functioning of the computer network by eliminating messages that would otherwise need to be sent to unqualified recipients, thereby freeing bandwidth and memory.” (Appeal Br. 30 (citing Spec. ¶¶ 120–164).) Specifically, Appellant’s Specification compared the performance of a computer system when “executing a prior art

email blast type advertising campaign” (Spec. ¶ 123) with the performance of the same computer system when executing the advertising campaign described in the Specification (*id.* ¶ 124). Appellant concludes that these improvements reflect an “improvement in the functioning of the computer itself.” (Appeal Br. 31.) However, I am not persuaded that this improvement reflects an improvement to the functioning of the computer itself, as opposed to an improvement in known forms of advertising (i.e., a commercial interaction that is the abstract idea itself).

I find nothing of record, short of attorney argument, that attributes an improvement in technology and/or a technical field to the claimed invention or that otherwise indicates that the claimed invention integrates the abstract idea into a “practical application,” as that phrase is used in the Revised Guidance. (*See* 2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 55.) At best, claim 1 generally applies the abstract idea to a particular technological environment or field of use using generic communication devices (e.g., peer-to-peer communication among generic communication devices).

Step Two of the Mayo/Alice Framework (2019 § 101 Guidance, Step 2B)

Having determined under step one of the *Mayo/Alice* framework that claim 1 is directed to an abstract idea, I next consider under Step 2B of the 2019 Revised Guidance, the second step of the *Mayo/Alice* framework, whether claim 1 includes additional elements or a combination of elements that provides an “inventive concept,” i.e., whether the additional elements

amount to “significantly more” than the judicial exception itself. (2019 § 101 Guidance, Federal Register Vol. 84, No. 4, at 55.)

Appellant asserts claim 1 “uses different techniques than the prior art discloses and so achieves an improved technological result.” (Appeal Br. 26.) Specifically, Appellant quotes limitations (f) and (g) and asserts that the destination communication device would be unable “to access information relating to a matched advertiser or a selected promotion without the executable link” and that “there would not be a way for the destination [communication] device to identify, provide, or store information related to the endorsement, source, or contact without the unique identifier.” (*Id.* at 26–27.) Appellant further asserts that “these features cannot be routine or well-known because, as admitted by the Office Action, they are not found in the prior art.” (*Id.* at 27.) These arguments are not persuasive for much the same reasons discussed above.

As an initial matter, although the second step in the *Mayo/Alice* framework is termed a search for an “inventive concept,” the analysis is not an evaluation of novelty or non-obviousness, but, rather, a search for “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.’” *Alice*, 573 U.S. at 217–18 (alteration in original). I am not persuaded that the Appellant has identified any limitation or combination of limitations that amounts to significantly more than the abstract idea itself.

For example, Appellant asserts that the executable link of limitation (f) enables the destination communication device to access information related to an advertiser or promotion. (Appeal Br. 27.) But,

ultimately accessing this information (even if not positively recited in claim 1) is a critical part of the abstract idea to which the claim is directed, i.e., a peer-to-peer distribution of promotional information (or advertising), which is a commercial interaction and, thus, an abstract idea.

Appellant cannot reasonably contend, nor does Appellant, that there is a genuine issue of material fact regarding whether the transmission from the intermediary to the source communication device of the executable link is well understood, routine, or conventional, where, as here, there is nothing in the Specification to indicate that the operation recited limitation (f) of claim requires more than using existing computers or the Internet to carry out conventional processes. Indeed, the Federal Circuit, in accordance with *Alice*, has “repeatedly recognized the absence of a genuine dispute as to eligibility” where claims have been defended as involving an inventive concept based “merely on the idea of using existing computers or the Internet to carry out conventional processes, with no alteration of computer functionality.” *Berkheimer v. HP Inc.*, 890 F.3d 1369, 1373 (Fed. Cir. 2018) (Moore, J., concurring); *see also BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1291 (Fed. Cir. 2018) (“BSG Tech does not argue that other, non-abstract features of the claimed inventions, alone or in combination, are not well-understood, routine and conventional database structures and activities. Accordingly, the district court did not err in determining that the asserted claims lack an inventive concept.”.)

Turning to limitation (g) of claim 1, as an initial matter, I assume Appellant intended to state that there was no way for the intermediary (not the destination communication device) to identify, provide, or store information related to the endorsement, source, or contact without the

unique identifier. I find no indication, and Appellant does not identify any indication, in the Specification for the destination communication device using the unique identifier to perform the functions described by Appellant, and the destination communication device would seemingly have no need to identify itself with a code. But to the extent that the inventive concept purportedly lies in these additional functions performed by the intermediary or the destination device, no such functionality is recited in claim 1. Thus, the purported inventive concept lies outside the scope of claim 1.

Instead, limitation (g) of claim 1, the final limitation, recites hashing three codes to form a unique identifier that is to be included in the content communication sent to the destination communication device. The Specification makes clear that this hashing is well known, routine, and conventional in the art. (*See* Spec. ¶ 109 (“[T]he unique identifier . . . is created by combining several separate codes together in any one of many encryption routines (known in the art as ‘hashing’) to form a code that is unique for each endorsement sent by a subscriber.”) Appellant further acknowledges in the Appeal Brief that claimed function of hashing is well known. (*See* Appeal Br. 28 (“One example of a hashing function that is in accordance with what is described in the specification is the MD5 Message-Digest Algorithm from RFC1321, a copy of which [is] included with this response as Exhibit F.”) Additionally, as set forth above, the Federal Circuit has repeatedly held that generic encoding, such as the hashing operation recited in limitation (g), constitutes an abstract idea.

Here, Appellant has not identified, and I do not find, any additional elements recited in claim 1, individually or in combination, that provide significantly more than the abstract idea.

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I am not persuaded, on the present record, that the Examiner erred in rejecting independent claim 1 under 35 U.S.C. § 101. Therefore, I would sustain the Examiner's rejection of claim 1, and claims 2–14, 31, 32, which would fall with claim 1.