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Mannava & Kang, P. C.
3201 Jermantown Road
Suite 525
Fairfax, VA 22030

EXAMINER
SHANKER, JULIE MEYERS

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte NUWAN SENARATNA and AUSTIN BYRNE

Appeal 2018-005467
Application 13/802,405
Technology Center 3600

Before NINA L. MEDLOCK, AMEE A. SHAH, and MATTHEW S. MEYERS, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1, 2, 4–12, and 14–19. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

CLAIMED INVENTION

Appellant's claimed invention "relates to online systems and in particular to reviewing advertisements in an online system" (Spec. ¶ 1).

Claims 1 and 11 are the independent claims on appeal. Claim 1, reproduced below with bracketed notations added, is illustrative of the claimed subject matter:

> 1. A computer implemented method comprising:
> [(a)] receiving, at an online system, an advertisement from an advertiser;
> [(b)] dividing, by one or more computers, the advertisement into a plurality of components;
> [(c)] for each of the plurality of components of the advertisement, determining, by the one or more computers, one or more tags describing characteristics of the components, wherein the one or more tags are independent of policies of the online system;

[1] We use the term "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Our decision references Appellant's Appeal Brief ("Appeal Br.," filed May 8, 2017) and Reply Brief ("Reply Br.," filed May 3, 2018), and the Examiner's Answer ("Ans.," mailed March 14, 2018), and Final Office Action ("Final Act.," mailed December 2, 2016). We note that the pages of both Appellant's Appeal Brief and its Reply Brief are unnumbered; we refer to the title page of each of the briefs as page 1 and treat the pages that follow as though consecutively numbered. Appellant identifies Facebook, Inc. as the real party in interest (Appeal Br. 2).

> [(d)] determining, by the one or more computers, whether the component of the advertisement requires further review;
>
> [(e)] responsive to determining that the component requires further review, sending, by the one or more computers, the component to multiple human reviewers to update the one or more tags describing characteristics of the component;
>
> [(f)] storing, by the one or more computers, an association between each of the plurality of components of the advertisement and the determined one or more tags describing the characteristics of the component;
>
> [(g)] retrieving, by the one or more computers, a policy of the online system, the policy of the online system including one or more advertisement rules;
>
> [(h)] retrieving, by the one or more computers, the one or more tags describing the characteristics of the component; and
>
> [(i)] determining, by the one or more computers, whether the component of the advertisement satisfies one or more policies of the online system by applying the one or more policies to the one or more tags associated with the component without applying the one or more policies to the component;
>
> [(j)] detecting, by the one or more computers, a new policy of the online system, the new policy updated from the policy of the online system; and
>
> [(k)] responsive to detecting the new policy of the online system, reevaluating, by the one or more computers, the component of the advertisement by applying the new policy to the one or more tags associated with the component.

REJECTIONS

Claims 1, 2, 4–12, and 14–19 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

Claims 1, 2, 5–12, and 15–17 are rejected under 35 U.S.C. § 103(a) as unpatentable over Badros et al. (US 2006/0149623 A1, published July 6, 2006) ("Badros"), Minter et al. (US 2010/0287052 A1, published Nov. 11,

2010) ("Minter"), and Makeev et al. (US 2008/0313030 A1, published Dec. 18, 2008) ("Makeev").

Claims 4 and 14 are rejected under 35 U.S.C. § 103(a) as unpatentable over Badros, Minter, Makeev, and Merdinger (US 2008/0033822 A1, published Feb. 7, 2008).

Claims 18 and 19 are rejected under 35 U.S.C. § 103(a) as unpatentable over Badros, Minter, Makeev, and Kae (US 8,732,014 B2, issued May 20, 2014).

ANALYSIS

Patent Ineligible Subject Matter

Appellant argues the pending claims as a group (Appeal Br. 4–20). We select independent claim 1 as representative. The remaining claims stand or fall with claim 1. *See* 37 C.F.R. §41.37(c)(1)(iv).

Under 35 U.S.C. § 101, an invention is patent eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: "[l]aws of nature, natural phenomena, and abstract ideas" are not patentable. *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice Corp.*, 573 U.S. at 217. The first step in that analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts." *Id.* If the claims are not

directed to a patent-ineligible concept, e.g., an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered "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). This is "a 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.* at 217–18 (alteration in original).

In rejecting the pending claims under 35 U.S.C. § 101, the Examiner determined that is the claims are directed to

> categorizing components of an ad with tags, comparing tags associated with components of an advertisement with policies to determine whether the ad component satisfies the policy, and reevaluating the ad by comparing new or updated policies to the tags of the ad components to determine whether an ad satisfies an updated policy[,]

i.e., to an abstract idea similar to other concepts that the courts have held abstract (Final Act. 8–9). The Examiner also determined that the claims do not include additional elements or a combination of elements that is sufficient to amount to significantly more than the abstract idea itself (*id.* at 9–11).

After Appellant's briefs were filed and the Examiner's Answer mailed, the U.S. Patent and Trademark Office (the "USPTO") published revised guidance for use by USPTO personnel in evaluating subject matter eligibility under 35 U.S.C. § 101. 2019 REVISED PATENT SUBJECT MATTER ELIGIBILITY GUIDANCE, 84 Fed. Reg. 50, 57 (Jan. 7, 2019) (the "2019 Revised Guidance"). That guidance revised the USPTO's examination

procedure with respect to the first step of the *Mayo*/*Alice* framework by (1) "[p]roviding groupings of subject matter that [are] considered an abstract idea"; and (2) clarifying that a claim is not "directed to" a judicial exception if the judicial exception is integrated into a practical application of that exception. *Id.* at 50. The 2019 Revised Guidance, by its terms, applies to all applications, and to all patents resulting from applications, filed before, on, or after January 7, 2019. *Id.*[2]

Step One of the Mayo/Alice Framework (*2019 Revised Guidance*, *Step 2A*)

The first step in the *Mayo*/*Alice* framework, as mentioned above, is to determine whether the claims at issue are "directed to" a patent-ineligible concept, e.g., an abstract idea. *Alice Corp.*, 573 U.S. at 217. This first step, as set forth in the 2019 Revised Guidance (i.e., Step 2A), is a two-prong test; in Step 2A, Prong One, we look to whether the claim recites a judicial exception, e.g., one of the following three groupings of abstract ideas: (1) mathematical concepts; (2) certain methods of organizing human activity, e.g., fundamental economic principles or practices, commercial or legal interactions; and (3) mental processes. 2019 Revised Guidance, 84 Fed. Reg. at 54. If so, we next consider whether the claim includes additional elements, beyond the judicial exception, that "integrate the [judicial] exception into a practical application," i.e., that apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed

[2] The USPTO issued an update on October 17, 2019 (the "October 2019 Update: Subject Matter Eligibility," available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf) clarifying the 2019 Revised Guidance in response to comments solicited from the public.

to monopolize the judicial exception ("Step 2A, Prong Two"). *Id.* at 54–55. Only if the claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application do we conclude that the claim is "directed to" the judicial exception, e.g., an abstract idea. *Id.*

We are not persuaded by Appellant's arguments that the Examiner erred in determining that claim 1 is directed to an abstract idea (Appeal Br. 5–15). 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, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (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 the claim 1 focuses on an abstract idea, and not on any improvement to technology and/or a technical field.

The Specification is titled "REVIEWING ADVERTISEMENT COMPONENTS FOR COMPLIANCE WITH POLICIES OF AN ONLINE SYSTEM," and describes, in the Background section, that many online systems specify policies with which advertisements must comply before being presented by the online system (Spec. ¶ 3). Over time, an online system may change one or more of its policies, and these policy changes affect which advertisements are presented to users (*id.*). The Specification discloses that "[i]n conventional online systems, changing a policy . . . requires manually specifying the modified policy to the online system or

additional training for review[er]s manually reviewing advertisements" — a process that the Specification describes may be expensive and time-consuming (*id.*).

The claimed invention is ostensibly intended to improve on these conventional systems. The Specification, thus, describes that "[t]o resource the time and resources consumed by changing a policy applied to advertisements, the online system divides advertisements into components" (e.g., a title component that provides a brief description of the advertisement; a body component that detail the product or service associated with the advertisement; an audience component that describes the users to be presented with the advertisement) and "separately reviews each component of an advertisement" (*id.* ¶¶ 4, 21). To that end, the system assigns, to each component, one or more policy-independent tags (i.e., tags that do not change with changes in the online system policy), which describe the characteristics of the component (*id.*). And the system uses these tags, i.e., the characteristics of the components, to determine whether the advertisement satisfies the online system policies; if a component is associated with a tag included in a blacklist, the advertisement is determined not to comply with a policy of the online system and is not presented to online system users (*id.* ¶¶ 5, 27). The Specification describes that, in some embodiments, if the analysis of a component is complex, the system may suggest manual review of the component; in that circumstance, the ad component is sent to one or more human reviewers to determine the appropriate component tag(s) (*id.* ¶¶ 24–26).

Consistent with this disclosure, claim 1 recites a computer-implemented method comprising: (1) receiving an advertisement at an online

system, dividing the advertisement into components, and determining one or more tags for each ad component, i.e.,

> receiving, at an online system, an advertisement from an advertiser;
>
> dividing, by one or more computers, the advertisement into a plurality of components; [and]
>
> for each of the plurality of components of the advertisement, determining, by the one or more computers, one or more tags describing characteristics of the components, wherein the one or more tags are independent of policies of the online system

(steps (a), (b), and (c)); (2) determining whether a component requires further review and, if so, sending the component to human reviewers to update the one or more component tags, i.e.,

> determining, by the one or more computers, whether the component of the advertisement requires further review; [and]
>
> responsive to determining that the component requires further review, sending, by the one or more computers, the component to multiple human reviewers to update the one or more tags describing characteristics of the component

(steps (d) and (e)); (3) "storing . . . an association between each of the . . . components of the advertisement and the . . . one or more tags describing the characteristics of the component" (step (f)); (4) retrieving the online system policy and the one or more tags associated with an ad component, and applying the policy to the tags to determine whether the ad component satisfies the online system policy, i.e.,

> retrieving, by the one or more computers, a policy of the online system, the policy of the online system including one or more advertisement rules;
>
> retrieving, by the one or more computers, the one or more tags describing the characteristics of the component; and
>
> determining, by the one or more computers, whether the component of the advertisement satisfies one or more policies of

> the online system by applying the one or more policies to the one or more tags associated with the component without applying the one or more policies to the component

(steps (g), (h), and (i)); and (5) detecting a new online system policy and reevaluating the ad component by applying the new policy to the one or more component tags, i.e.,

> detecting, by the one or more computers, a new policy of the online system, the new policy updated from the policy of the online system; and
>
> responsive to detecting the new policy of the online system, reevaluating, by the one or more computers, the component of the advertisement by applying the new policy to the one or more tags associated with the component

(steps (j) and (k)). These limitations, when given their broadest reasonable interpretation, recite determining whether an advertisement complies with an online system policy by dividing the ad into components, tagging the components, and applying the policy to the component tags.

Claim 1 recites that the claimed steps (but for the further review) are performed by "one or more computers." Yet, we agree with the Examiner that the underlying processes recited in the claim are all acts that could be performed by a human, e.g., mentally or manually, using pen and paper, without the use of a computer or any other machine (Final Act. 3–4, 6).[3] Indeed, Appellant ostensibly concedes as much (*see* Appeal Br. 5 ("As

[3] A human reviewer could, for example, receive an advertisement, via written communication, and, using pen and paper, could classify the advertisement by dividing the advertisement into components (e.g., title, body, audience) and associating tags with each component. Such a person, using pen and paper or mentally, also could compare the online system policy to the tags to determine whether the advertisement is policy compliant.

background, a human reviewer can traditionally evaluate advertisements for compliance with one or more policies of the online system"); *id.* at 7 (ostensibly conceding that a human reviewer could divide advertisement into components and associate tags with the components *albeit* less efficiently than via a computer: "Dividing the advertisement into components and associating tags would, in fact, require far more resources (e.g.[,] time) for a human reviewer which is contrary to the efforts to make the process more efficient"); Reply Br. 3 (observing that a human reviewer would visually examine an advertisement to determine whether the advertisement satisfies a system policy, and that "[i]f a human reviewer were to tag ad components and compare tags to policies, this would require more manual resources in comparison to a mere visual examination of the advertisement"); Spec. ¶ 3 (describing reviewers manually reviewing advertisements for policy compliance)).

Simply put, claim 1 recites a mental process, i.e., a concept performed in the human mind, including an evaluation or judgment, and therefore, an abstract idea. *See* 2019 Revised Guidance, 84 Fed. Reg. at 52; *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011) (holding that method steps that can be performed in the human mind, or by a human using a pen and paper, are unpatentable mental processes). *See also Elec. Power Grp., LLC v. Alstom, S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016) (explaining that the Federal Circuit treats "analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category"); *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1335 (Fed. Cir. 2015) ("Courts have examined claims that required the use of a

computer and still found that the underlying, patent-ineligible invention could be performed via pen and paper or in a person's mind."); *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) ("[T]he fact that the required calculations could be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter.").

Having concluded that claim 1 recites a judicial exception, i.e., an abstract idea (Step 2A, Prong One), we 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 "online system" and the "one or more computers" — elements that, as the Examiner observed, are recited at a high level of generality, i.e., as generic computer components performing generic computer functions (Final Act. 10; *see also* Spec. ¶¶ 15, 36, 37). We 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, invoke any assertedly inventive programming, 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.").

We 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 we find anything of record 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 2019 Revised Guidance.[4]

Appellant attempts to draw a parallel between claim 1 and the patent eligible claims at issue in *Enfish*, arguing that the pending claims are directed "towards a method of improving computer functionality" (Appeal Br. 6; *see also* Reply Br. 2–4). Appellant maintains that, "by associating tags with components of advertisements, and evaluating the advertisement by applying policies to the tags without applying the policies to the components of the advertisement," the claimed invention improves computer functionality in that it "allows the system 'to [reduce] the time and resources consumed by changing a policy applied to advertisements" (Appeal Br. 5–6 (citing Spec. ¶ 4)). Appellant asserts that this improvement is "similar to the improvement in computer functionality imparted by the implementation of the self-referential table" in *Enfish* (*id.* at 6). Yet, there is no evidence of record that the claimed method uses a data structure, like the self-referential table in *Enfish*, to improve a computer's functionality or efficiency, or otherwise change the way the computer operates.

[4] The 2019 Revised Guidance references MANUAL OF PATENT EXAMINING PROCEDURE ("MPEP") § 2106.05(a)–(c) and (e) in describing the considerations that are indicative that an additional element or combination of elements integrates the judicial exception, e.g., the abstract idea, into a practical application. 2019 Revised Guidance, 84 Fed. Reg. at 55. If the recited judicial exception is integrated into a practical application, as determined under one or more of these MPEP sections, the claim is not "directed to" the judicial exception.

Importantly too, there is a fundamental difference between computer functionality improvements, on the one hand, and uses of existing computers as tools to perform a particular task, on the other — a distinction that the Federal Circuit applied in *Enfish*, in rejecting a § 101 challenge at the first stage of the *Mayo*/*Alice* framework because the claims at issue focused on a specific type of data structure, i.e., the self-referential table, designed to improve the way a computer stores and retrieves data in memory, and not merely on asserted advances in uses to which existing computer capabilities could be put. *See Enfish*, 822 F.3d at 1335–36. The alleged improvement that Appellant touts, i.e., a reduction in the time and resources consumed by changing a policy applied to advertisements, does not concern an improvement to computer capabilities but instead relates to an alleged improvement in determining the policy compliance status of an advertisement — a process in which a computer is used as a tool in its ordinary capacity.

We also are not persuaded that there is any parallel between claim 1 and the patent eligible claim in *McRO, Inc. v. Bandai Namco Games America, Inc.*, 837 F.3d 1299 (Fed. Cir. 2016) (Appeal Br. 12–15). Appellant argues that "similar to the patent eligible claims in *McRO*, the claims here incorporate specific features, such as the tags that are descriptive of a component" and "recite limitations that specifically implement the particular tags" (*id.* at 13). Yet, the Federal Circuit premised its determination that the claim in *McRO* was patent eligible, not merely on the specificity of the claimed animation scheme, but on the fact that the claim, when considered as a whole, was directed to a technological improvement over existing, manual 3-D animation techniques and used limited rules in a

process specifically designed to achieve an improved technological result in conventional industry practice. *See McRO*, 837 F.3d at 1316.

We are not persuaded that the claimed invention, as recited in claim 1, achieves a comparable improved technological result. To the contrary, the claimed invention, when considered in light of the Specification, clearly appears focused on achieving a commercial objective, i.e., determining whether an advertisement complies with online system policies, and not on any claimed means for achieving that goal that improves technology.

We also are not persuaded of Examiner error to the extent Appellant maintains that claim 1 is patent eligible because there is no risk of preemption (Appeal Br. 14–15). Although 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 Corp.*, 573 U.S. at 216, 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 Corp.*, 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.*

We conclude, for the reasons outlined above, that claim 1 recites a mental process, i.e., an abstract idea, and that the additional elements recited in the claim are no more than generic computer components used as tools to perform the recited abstract idea. As such, they do not integrate the abstract

idea into a practical application. *See Alice Corp.*, 573 U.S. at 223–24 ("[W]holly generic computer implementation is not generally the sort of 'additional featur[e]' that provides any 'practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.'" (quoting *Mayo*, 566 U.S. at 77)). Accordingly, we agree with the Examiner that claim 1 is directed to an abstract idea.

Step Two of the Mayo/Alice Framework (*2019 Revised Guidance*, *Step 2B*)

Having determined under step one of the *Mayo*/*Alice* framework that claim 1 is directed to an abstract idea, we 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 Revised Guidance, 84 Fed. Reg. at 56.

Appellant attempts to draw an analogy between the present claims and those in *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016) (Appeal Br. 16–19; *see also* Reply Br. 5–6). Yet, we can find no parallel between claim 1 and the claims at issue in *BASCOM*.

There, the Federal Circuit determined that the claims were directed to a technology-based solution to filter Internet content that overcame existing problems with other Internet filtering systems by taking a known filtering solution — i.e., a "one-size-fits-all" filter at an Internet Service Provider ("ISP") — and making it more dynamic and efficient by providing individualized filtering at the ISP. *Id.* at 1351. The court, thus, held that the second step of the *Mayo*/*Alice* framework was satisfied because the claimed

invention "represents a 'software-based invention[ ] that improve[s] the performance of the computer system itself.'" *Id.*

Appellant argues that "[h]ere, the claimed invention is similar to *BASCOM* because the claim limitations that qualify as the additional elements recited in the claims, when considered in totality as an ordered combination, do not merely recite routine or conventional steps" (Appeal Br. 18–19). Yet, the limitations that Appellant identifies, i.e., "the steps of determining tags, which are policy-independent and descriptive of a component, associating tags with a component of the advertisement, evaluating a component by applying a policy to the tag, and reevaluating the component by applying an updated policy to the tag" (*see id.* at 19), are part of the abstract idea itself; they are not additional elements to be considered when determining whether claim 1 includes additional elements or a combination of elements that is sufficient to amount to significantly more than the judicial exception.

It could not be clearer from *Alice*, that under step two of the *Mayo*/*Alice* framework, the elements of each claim are considered both individually and "as an ordered combination" to determine whether the additional elements, i.e., the elements *other* than the abstract idea itself, "transform the nature of the claim" into a patent-eligible application. *Alice Corp.*, 573 U.S. at 217 (internal quotations and citation omitted); *see Mayo*, 566 U.S. at 72–73 (requiring that "a process that focuses upon the use of a natural law also contain *other* elements or a combination of elements, sometimes referred to as an 'inventive concept,' sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law itself" (emphasis added) (internal citation omitted)). In other

words, the inventive concept under step two of the *Mayo*/*Alice* test cannot be the abstract idea itself:

> It is clear from *Mayo* that the "inventive concept" cannot be the abstract idea itself, and *Berkheimer* . . . leave[s] untouched the numerous cases from this court which have held claims ineligible because the only alleged "inventive concept" is the abstract idea.

Berkheimer v. HP, Inc., 890 F.3d 1369, 1374 (Fed. Cir. 2018) (Moore, J., concurring); *see also BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018) ("It has been clear since *Alice* that a claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept.") (internal citation omitted).

The Examiner determined here, and we agree, that the only claim elements beyond the abstract idea are the "online system" and the "one or more computers," i.e., generic computer components used to perform generic computer functions (Final Act. 10) — a determination amply supported by, and fully consistent with the Specification (*see, e.g.*, Spec. ¶¶ 15, 36, 37).[5] Appellant cannot reasonably contend, nor does Appellant, that there is a genuine issue of material fact regarding whether the operation of these components is well-understood, routine, or conventional, where, as

[5] The Office's April 19, 2018 Memorandum to the Examining Corps from Deputy Commissioner for Patent Examination Policy, Robert W. Bahr, entitled, Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*), available at https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.PDF, expressly directs that an examiner may support the position that an additional element (or combination of elements) is well-understood, routine or conventional with "[a] citation to an express statement in the specification . . . that demonstrates the well-understood, routine, conventional nature of the additional element(s)" (*id.* at 3).

here, there is nothing in the Specification to indicate that the operations recited in claim 1 require any specialized hardware or inventive computer components or that the claimed invention is implemented using other than a generic computer component to perform generic computer functions, e.g., receiving, storing, and processing information. 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*, 890 F.3d at 1373 (Moore, J., concurring) (internal citations omitted); *see also BSG Tech*, 899 F.3d at 1291 ("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.").

We are not persuaded, on the present record, that the Examiner erred in rejecting independent claim 1 under 35 U.S.C. § 101. Therefore, we sustain the Examiner's rejection of claim 1, and claims 2, 4–12, and 14–19, which fall with claim 1.

Obviousness

Independent Claim 1 and Dependent Claims 2 and 5–10

Appellant argues that the obviousness rejection cannot be sustained because "one skilled in the art would not be motivated to combine the cited references, specifically Badros and Minter, as argued by the examiner" and further because "even if Badros and Minter were combined, their

combination does not function as described by the claimed invention" (Appeal Br. 21).

Badros is directed to a method for approving advertisements for service by an online ad serving system (Badros ¶ 9). In accordance with the method, advertisements are received and checked for violations of the online system's policy rules, and a set of policy violations is generated (*id.* ¶¶ 12, 85). The set of violations is then filtered using whitelist information to determine whether the violation is exempted, i.e., whether the advertisement can be approved notwithstanding the policy violation (*id.*; *see also id.* ¶ 87). Badros discloses that, in at least some embodiments, each violation "may contain information such as the policy violated, which creative or criteria the violation applies to . . . , and the violation text (referred to as 'Text')" (*id.* ¶ 88). The violation text, which the Examiner equates to the one or more tags, recited in claim 1, is compared to items in the whitelist to determine whether the violation is exempted and, therefore, can be ignored (*id.*).

Minter is directed to a short-range commercial messaging and advertising system that allows merchants to deliver advertising over wireless networks to consumer mobile devices within the vicinity of the merchant (Minter ¶ 6). Minter discloses that in some embodiments, the commercial message delivered to the mobile device includes a descriptive tag and associated content; the tag, which is in the form of a header, precedes the content and describes the content. For example, a 30-second video advertisement is immediately preceded by a tag that includes words or numerical descriptors that describe the advertisement, such as the identity of the merchant who is sourcing the content, the type of merchant, the type of product or service being advertised and/or the financial incentive being

offered (*id.* ¶ 42). The mobile device determines the "admission and output status" of the message by comparing the tag to predetermined policies stored on the mobile device (*id.*; *see also id.* ¶ 33 (disclosing that policies include, e.g., merchant identities, merchant types, product types, and/or financial inducements that are authorized or unauthorized and/or have a particular priority)). Minter discloses that the comparison may be a keyword comparison or a comparison of numerical descriptors for which there is a standard definition (*id.* ¶ 57).

In rejecting claim 1 under 35 U.S.C. § 103(a), the Examiner found that Badros discloses a computer-implemented system and method for determining whether advertisement components comply with policies of an online ad serving system by "dividing an advertisement into components, determining whether the components violate a policy, tagging the components when they potentially violate a policy with information characterizing the component, and then using the tags to determine whether the advertisement satisfies a policy [exemption]" (Final Act. 14). The Examiner cited Minter as establishing that it was known in the art before Appellant's invention to "tag advertisements describing characteristics of the components and use the tags to determine whether the advertisement should be approved or rejected based on rules and policies" (*id.* (citing Minter ¶¶ 42, 57)). And the Examiner concluded that it would have been obvious to a person of ordinary skill in the art at the time of Appellant's invention to modify the advertisement compliance system of Badros to include "determining tags independent of policies of the online system, storing associations between the tags and the advertisement being analyzed, and determining . . . whether the component of the advertisement satisfies one or

more policies of the online system by applying the one or more policies to the tag associated with the component . . . as taught in Minter," *inter alia*, because the claimed invention is simply a combination of old elements and in the combination "each element merely would have performed the same function in combination as it did separately, and one of ordinary skill in the art would have recognized that such a combination would have yielded predictable results" (*id.* at 16).

We agree with Appellant that the Examiner has not sufficiently established that a person of ordinary skill in the art would have had an apparent reason to combine the teachings of Badros and Minter, as the Examiner proposes. In both Badros and Minter, ad components are tagged, and rules are applied to the tags, to determine whether or not to approve an advertisement. In Minter, these rules are policies of the mobile device that are applied to tags (created by a third party content provider and provided to the mobile device with the associated content) to determine whether or not the advertisement should be accepted or rejected, i.e., whether or not the ad component violates a policy specified by the mobile device. In Badros, on the other hand, the rules are policy exemptions and are applied to tags, which are generated when an ad component has been identified as violating a system policy, to determine whether the advertisement should be approved notwithstanding the policy violation.

The Examiner, in our view, has not sufficiently established that a person of ordinary skill in the art at the time of Appellant's invention would have had an apparent reason to modify the Badros system, which tags components only after the components have been determined to violate a system policy and uses the tags to determine whether the policy violation

can be exempted, to instead implement tagging to determine whether an ad component satisfies a system policy in the first instance. It is not enough to show merely that individual elements of a claim may be found in the cited references; instead, the Examiner must present a cogent rationale to explain why a person of ordinary skill would have had an apparent reason to select and combine the individual elements to arrive at the claimed invention. *See In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) ("[R]ejections on obviousness grounds [require] some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness") (cited with approval in *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007)). The Examiner has failed to do so here.

In view of the foregoing, we do not sustain the Examiner's rejection of independent claim 1 under 35 U.S.C. § 103. For the same reasons, we also do not sustain the Examiner's rejection of dependent claims 2 and 5–10. *Cf. In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) ("dependent claims are nonobvious if the independent claims from which they depend are nonobvious").

Independent Claim 11 and Dependent Claims 12 and 15–17

Claim 11 includes language substantially similar to the language of claim 1 and stands rejected based on the same rationale applied with respect to claim 1 (Final Act. 22–27). Therefore, we do not sustain the Examiner's rejection under 35 U.S.C. § 103 of independent claim 11, and claims 12 and 15–17, which depend therefrom, for the same reasons set forth above with respect to claim 1.

Dependent Claims 4, 14, 18, and 19

The rejections of dependent claims 4, 14, 18, and 19 do not cure the deficiencies in the Examiner's rejection of independent claims 1 and 11. Therefore, we do not sustain the Examiner's rejections under 35 U.S.C. § 103 of these dependent claims.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 2, 4–12, 14–19	101	Eligibility	1, 2, 4–12, 14–19	
1, 2, 5–12, 15–17	103	Badros, Minter, Makeev		1, 2, 5–12, 15–17
4, 14	103	Badros, Minter, Makeev, Merdinger		4, 14
18, 19	103	Badros, Minter, Makeev, Kae		18, 19
Overall Outcome			1, 2, 4–12, 14–19	

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED