REMARKS

No claims have been added or canceled. Claims 1-20 are pending in the application. Reconsideration is respectfully requested in light of the amendments and the following remarks.

The Telephonic Interview of March 19, 2019 Advanced Prosecution

Applicant appreciates the courtesies extended by the Examiner in the telephonic interview of March 19, 2018 between Examiner McAtee and Applicant's attorney (Scott Arlon Waite, Reg. No. 61,829).

Applicant's attorney explained the eligibility of Applicant's claimed subject matter. Applicant's attorney has taken the Examiner's feedback from the interview into consideration in preparing this formal response. The Examiner agreed to consider further upon submission of a formal response.

A further telephone interview is hereby formally requested if any issues remain preventing allowance. Applicant's attorney may be reached at 512-853-8850.

Claims 1-20 Recite Patent-Eligible Subject Matter:

The Office Action rejected claims 1-20 under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Reconsideration and withdrawal of the rejection is respectfully requested for at least these reasons.

At the outset, the claims have been amended along the lines recommended by the office during the interview. Reconsideration in view of the amendments is respectfully requested.

13

At the outset, the USPTO recently released notice of the 2019 Revised Patent Subject Matter Eligibility Guidance that revises the procedures for determining whether a patent claim or patent application claim is directed to a judicial exception (laws of nature, natural phenomena, and abstract ideas) under Step 2A of the USPTO's Subject Matter Eligibility Guidance. At least to the extent that the 2019 Guidance alters the analysis required for making a prima facie showing of ineligibility, and to the extent the office has not met those requirements, a prima facie showing of ineligibility has not been made.

While a rejection in-line with the analysis of the 2019 Guidance has not been made by the office (the 2019-02021 Advisory Action relies upon the merely conclusory statement, "The examiner maintains that the claims would be ineligible under the 2019 PEG for the same reasons found in the final Office action mailed December 10, 2018), Applicant proactively provides the following related analysis to expedite allowance.

The 2019 Guidance revises Step 2A for evaluating whether the claim recites a judicial exception. Under the revised Step 2A, to determine whether a claim recites an abstract idea, examiners are now to:

a) Identify the specific limitation(s) in the claim under examination (individually or in combination) that the examiner believes recites an abstract idea; and

b) determine whether the identified limitation(s) falls within the subject matter groupings of abstract ideas enumerated in Section I of the 2019 Revised Patent Subject Matter Eligibility Guidance.

In this case, the office has determined (on p. 4 of the latest office action) that the claim falls within the subject matter grouping of "certain methods of organizing human activity."

But, on p. 10 the 2019 Guidance provides examples of abstract ideas, and none of those examples are anything like Applicant's claimed subject matter:

fundamental economic principles or practices (including hedging, insurance, mitigating risk); commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations); managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions).

The above-noted examples are directed to organizing <u>human</u> activity. None of the above-reproduced examples pertain to *computing nodes [that] implement an approval service that receives and manage approval requests pertaining to provisioning, administering, or managing computing resources on behalf of the backend services, wherein at least some approval requests trigger messages between the approval service and one or more members over a network external to the service provider network on behalf of the backend services [in combination with] a backend interface of the approval service within the service provider network for the backend services for exchanging approval requests and approval results over the service provider network between the approval service and the backend services, as recited in Applicant's claims (using claim 1 and an example).*

Thus, at least because Applicant's claimed *computing nodes [that] implement an* approval service that receives and manage approval requests pertaining to provisioning, administering, or managing computing resources on behalf of the backend services, wherein at least some approval requests trigger messages between the approval service and one or more members over a network external to the service provider network on behalf of the backend services; a backend interface of the approval service within the service provider network for the backend services for exchanging approval requests and approval results over the service provider network between the approval service and the backend services is not anything like the above-reproduced examples in the 2019 Guidance for certain methods of organizing human activity, Applicant's claimed subject matter is not directed to certain methods of organizing human activity.

Applicant's amended subject matter falls outside the subject matter groupings of abstract ideas enumerated in Section I of the 2019 Revised Patent Subject Matter Eligibility Guidance.

15

In particular, Applicant's amended subject matter clarifies that the approval service is the "go-between" between multiple backend services of the service provider and members of approval groups that are external to the service provider network. The approval service takes care of managing the approval requests (e.g., sending notifications to, and receiving responses from members that are on an external network) for the backend services so each backend service does not have to separately implement such functionality.

For example, FIGs. 2 and 10 illustrate how the approval service 258/1055 provides a common internal backend interface (e.g., 214/1014) for approval requests, offloads approval request handling from backend services (e.g., other services and or service platforms 212, 1006, 1008, 1010, 1012) and serves as an intermediary (e.g., external messaging service 262/1062/1064/1066/1068) to external approval members (e.g., service customer end users 275/1075) thus bridging the provider network and external network.

In particular, Applicant's amended claims recite a meaningful feature that, in describing the approval requests being communicated by the approval service on behalf of the backend services, go beyond generally linking the use of the judicial exception to a particular technological environment, "wherein at least some approval requests trigger messages between the approval service and one or more members over a network external to the service provider network on behalf of the backend services." Such functionality is illustrated in FIGs. 2 and 10, and described in multiple portions of Applicant's Detailed Description (e.g., para. 32, "notification may be performed in a variety of different ways, in different embodiments, including but not limited to, sending a notification message over a data stream, placing a notification in a message inbox, sending a notification using an external messaging service (e.g., in an email or text message), or sending a notification to a console of the approval service or another service in this system," para. 38, "notification service 258 may provide various APIs 260 through which end user consoles (such as those shown as 264 and 266) and/or an external messaging service (such as external messaging service 262) interact with notification 258 (e.g., to submit, retrieve, and/or respond to approval requests)."

Also, Applicant's amended claims recite the meaningful feature that, in describing the approval service as an internal destination of the service provider for the backend services, go beyond generally linking the use of the judicial exception to a particular technological environment "a backend interface <u>of the approval service within the service provider network for the backend services</u> for exchanging approval requests and approval results over <u>the service provider</u> network between the approval service and the backend services," which is also supported by FIGs. 2 and 10 and various parts of the Detailed Description (e.g., para. 86, "approval service 1055 may employ notification service 1058 in managing various approval requests on behalf of the customer organization.").

Also, Applicant's amended claims recite the following group of meaningful features that, in describing interactions between internal and external components that facilitate the above-noted approval service as an internal destination of the service provider for the backend services to make requests that require responses from external members, go beyond generally linking the use of the judicial exception to a particular technological environment:

The approval service is configured to: [...]

- receive, over the <u>service provider</u> network from one of the one or more backend services, a given one of the one or more approval requests;
- notify one or more of the members of the approval group, <u>over the</u> <u>network external to the service provider</u>, that the given approval request has been received; and
- receive, <u>over the external network</u> from the one or more of the members of the approval group, a respective response to the given approval request;
- determine, based at least in part on the received responses and the one or more criteria, a result of the given approval request; and
- transmit, via the backend interface over the <u>service provider</u> network to the one of the one or more backend services, an indication of the result of the given approval request.

Thus, the amended claim language describes more technical aspects about coordination of network communications.

Applicant's claimed subject matter solves the technical problem of a back-end service in the provider network that needs to get approval for something a user wants to do involving that service. Without Applicant's claimed subject matter, the backend service would not only have to keep track of the entities in the relevant approval group itself, but would also have to know the network addresses of each entity in the approval group and have the appropriate networking permissions to contact those entities. Applicant's figures and Detailed Description illustrate and explain that some of the approval entities maybe external to the provider network, whereas the backend service may not even be allowed to communicate with external third parties (or that may be undesirable for security reasons).

The claimed subject matter describes an approval service that solves these technical networking problems by being a single trusted communication point where the backend service can safely make a single request over the internal provider network and the approval service handles all the network communications with the approval entities, including external network communications. The approval response is then safely communicated back to the backend service over the internal provider network so that the backend service is shielded from any direct network interactions with approval entities (especially those that are external to the provider network).

Therefore, instead of being anything like the abstract ideas enumerated in Section I of the 2019 Revised Patent Subject Matter Eligibility Guidance, Applicant's claimed subject matter describes a material implementation more like the subject matter in Bascom (wherein the Court relied upon the particular arrangement of the combination of elements as an improvement over prior ways). Here, the particular arrangement (architecture) of a single trusted communication point where the backend service can safely make a single request over the internal provider network and the approval service handles all the network communications with the approval entities, including external network communications, is a material implementation, not an abstract idea.

Additionally, *arguendo*, even if the subject matter is found to fall within the identified groupings, the guidance explains that a patent claim or patent application claim that recites a judicial exception is not "directed to" the judicial exception if the judicial

exception is integrated into a <u>practical application</u> of the judicial exception. At least because the office has not provided a rationale for finding Applicant's subject matter not directed to a practical application, a prima facie showing of ineligibility has not been made.

Further, as explained above, the figures and text of Applicant's Detailed Description explain the practical application that solves problems associated with prior approval services. Paragraph 2 of Applicant's Detailed Description explains some of the problems associated with prior approval systems (approval systems based on email exchanges without the improvements described in Applicant's claim).

In addition, requests for approval to perform tasks or access resources are often sent from employees or managers to other employees, managers and/or other authority figures using emails or text messaging. However, once the emails or text messages are sent, the sender does not have any control over them, nor any mechanism for determining whether or not the instructions were followed (or for determining the state of pending approval requests). In some cases, if there are multiple acceptable actions that an organization member can take in response to such a message, the sender might like to know which of these actions, if any were taken. In some cases, if an email or text message that includes instructions to perform a task (or respond to an approval request) is sent to multiple people (e.g., all of the members of a department or project team), the sender will typically not have any control over, or knowledge of, which, if any, of the recipients actually read the email or text message and/or perform the task (or respond to the approval request). Therefore, in an organization in which many such emails or text messages are exchanged between the members of the organization, keeping track of what has or has not been done (much less by whom) can be difficult and error-prone. In addition, this approach can easily lead to an important task going unperformed (or an important approval request being ignored) while each member of the organization that received the message assumes that another member will perform the task (or respond to the approval request).

Applicant's claim describes a <u>practical application</u> that is an improvement to prior (e.g., e-mail-based) approval service that solves these problems by being a single trusted communication point where the backend service can safely make a single request over the internal provider network and the approval service handles all the network communications with the approval entities, including external network communications. The approval response is then safely communicated back to the backend service over the internal

provider network so that the backend service is shielded from any direct network interactions with approval entities (especially those that are external to the provider network).

Therefore, for at least these numerous reasons, claims 1, 6 and 17 recite eligible subject matter. Reconsideration and withdrawal of the rejection of independent claims 1, 6 and 17 is respectfully requested for at least these reasons.

Dependent Claims 2-5, 7-16 and 18-20 Recite Patent-Eligible Subject Matter

Dependent claims 2-5, 7-16 and 18-20 include additional elements that are also patent-eligible. Applicant traverses the rejection of these claims for at least the reasons given above in regard to the claims from which they depend. However, at least because Applicant's representative has established that the independent claims are patent-eligible, and at least because the dependent claims have not been analyzed in accordance with the *2019 Guidance*, further discussion of the dependent claim is not necessary at this time. Applicant reserves the right to present additional arguments.

CONCLUSION

Applicant submits the application is in condition for allowance, and an early notice to that effect is respectfully requested.

If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5924-92800/RCK.

Respectfully submitted,

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