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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* LIAM HARPUR, MARK KELLY, and JOHN RICE<sup>1</sup>

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Appeal 2019-003450  
Application 13/270,422  
Technology Center 2400

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Before BRADLEY W. BAUMEISTER, SHARON FENICK, and  
MICHAEL J. ENGLE, *Administrative Patent Judges*.

BAUMEISTER, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner’s final rejection of claims 25–42, which constitute all claims pending in this application. Appeal Br. 2. We have jurisdiction under 35 U.S.C. § 6(b). The Board conducts a limited *de novo* review of the appealed rejections for error based upon the issues identified by Appellant, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential).

We AFFIRM IN PART.

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<sup>1</sup> Appellant identifies IBM Corporation as the real party in interest. Appeal Brief filed December 11, 2018 (“Appeal Br.”), 1.

### CLAIMED SUBJECT MATTER

Appellant describes the present invention as follows:

A method of handling a message comprises receiving a message comprising content such as keywords, receiving a selection of one or more recipients for the message, identifying that at least one recipient is unfamiliar with a portion of the message, and notifying the composer of the message of the portion.

Abstract.

Independent claim 25 illustrates the appealed claims:

25. A computer-implemented method, comprising:

receiving an electronic message, sent by a sending client device in an instant messaging session, to a plurality of recipients;

identifying, for each of the plurality of recipients, whether the recipient is unfamiliar with a portion of the electronic message;

calculating a total number of the plurality of recipients to which the electronic message is directed;

calculating, for the portion of the electronic message, a total number of the plurality of recipients who were determined as being unfamiliar with the portion of the electronic message; and

forwarding, to the sending client device, a notification indicative of a total number of the plurality of recipients to which the electronic message is directed and the total number of the plurality of recipients who were determined as being unfamiliar with the portion of the electronic message, wherein,

the notification causes an instant messaging client with the client device to display a percentage,

the percentage is determined by dividing the total number of the plurality of recipients who were determined as being unfamiliar with the portion of the electronic message by the total number of the plurality of recipients to which the electronic message is directed, and

the notification does not indicate, to the client device, an identity of any of the plurality of recipients who were determined as being unfamiliar with the portion of the electronic message.

Appeal Br. 21.

#### STATEMENT OF THE REJECTIONS

Claims 25–42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cheung (US 2006/0167992 A1; published July 27, 2006) and Fiatal (US 2008/0298386 A1; published Dec. 4, 2008). Final Action mailed July 12, 2018 (“Final Act.”), 4–10.

#### THE EXAMINER’S DETERMINATIONS

The Examiner finds that Cheung discloses receiving an electronic message that is sent by a sending client device in an instant message session to a plurality of recipients. Final Act. 4 (citing Cheung ¶¶ 12, 31–33; Fig. 4). The Examiner finds that Cheung further teaches identifying, for each of the plurality of recipients, whether the recipient is unfamiliar with a portion of the electronic message. *Id.* at 5 (citing Cheung ¶¶ 31–33; Fig. 3B).

The Examiner finds that Fiatal discloses establishing consensus on a given issue using feedback, such as by a poll, in order to aid an origin entity about the audience. Final Act. 5 (citing Fiatal ¶¶ 5–6). Specifically, the Examiner finds that Fiatal teaches the steps of (1) calculating a total number of recipients to which the electronic message is directed; (2) calculating a total number of the recipients who were unfamiliar with a portion of the electronic message; and (3) forwarding this information to the sending client device. *Id.* at 5–6 (citing Fiatal ¶ 20). The Examiner determines that (1) the

notification causes an instant message client with the client device to display the percentage of recipients who were unfamiliar with the content; and (2) the notification does so without indicating to the client device the identities of those recipients who are unfamiliar. *Id.* at 6 (citing *Fiatal* ¶ 20). The Examiner also determines that motivation existed to combine the teachings of Cheung and *Fiatal*. *Id.*

### CONTENTIONS AND ANALYSIS

Appellant presents multiple arguments in relation to independent claim 25. Appeal Br. 6–16. We address them *seriatim*.

Appellant argues,

*Fiatal* does not teach determining a number of a plurality of recipients that were determined as being unfamiliar with a portion of an electronic message. Rather, and with reference to the Examiner’s cited paragraph [0020], *Fiatal* teaches performing a polling operation in which one or more polling questions are submitted to a plurality of recipients. *Fiatal* then determines a “percentage of correct responses for each poll question” and “percentages of responses that are correct or incorrect.”

Appeal Br. 10.

Appellant argues that this difference leads to two problems:

First, what is “correct or incorrect” is the answer to the polling question - not the question itself. The polling question itself is the message that was sent to the plurality of recipients. Accordingly, *Fiatal* does not teach calculating a percentage of recipients that were determined to be unfamiliar with the question (i.e., the alleged electronic message). Rather, *Fiatal* teaches calculating a percentage of recipients that submitted the incorrect answer (i.e., a reply message separate from the polling question).

A second problem with the Examiner's analysis is that Fiatal does not teach determining a percentage for a portion of the message. Each polling question[] is a separate and distinct message. According, even if the polling question itself of Fiatal could be considered comparable to the claimed message, what a recipient is unfamiliar with is the entire polling question - not a portion thereof. Along the same lines, the teachings of Fiatal do not recognize a difference between a portion of a message and the entire message, which is an important part of the claimed invention. Consequently, Fiatal fails to teach or suggest the limitations for which Fiatal alone is being relied upon to teach.

Appeal Br. 10–11.

These arguments are unpersuasive because Appellant essentially is arguing that Fiatal's invention cannot be bodily incorporated into the invention of Cheung. Appeal Br. 10–11. "The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference . . . . Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425 (CCPA 1981); *see also In re Sneed*, 710 F.2d 1544, 1550 (Fed. Cir. 1983) ("[I]t is not necessary that the inventions of the references be physically combinable to render obvious the invention under review."); *In re Nievelt*, 482 F.2d 965, 968 (CCPA 1973) ("Combining the *teachings* of references does not involve an ability to combine their specific structures."). Rather, "if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007).

Here, we understand the Examiner's position to be, and we agree, that Cheung discloses an instant-messaging protocol between a sender and one or

more recipients that addresses the problem of recipients not understanding a specific term. Cheung ¶¶ 12, 31, *cited in* Final Act. 4–5. Furthermore, Cheung addresses this problem by (1) allowing recipients to select non-understood terms for translation, and (2) sending feedback to the sender that the recipient is having difficulty understanding a term and is requesting annotation. *Id.* at 33, *cited in* Final Act. 5.

We further understand the Examiner *not* to be relying on Fiatal for its specific polling protocol, but more generally for its teaching that feedback from a plurality of recipients of text communications can be tallied and the results provided to the sender of the text communication, whereby the sender can be informed of the percentage of people who are having difficulty understanding a concept. Fiatal ¶¶ 5, 6, 20, *cited in* Final Act. 5–6.

Appellant further argues, “the Examiner has not alleged that Cheung teaches any portion of the limitations at issue. . . . [T]he Examiner admits that Cheung fails to teach these limitations. Instead, the Examiner relies upon Fiatal alone.” Appeal Br. 11. We understand Appellant’s reference to “the limitations at issue” to mean the claim requirements of “calculating a total number of the plurality of recipients to which the electronic message is directed” and calculating, for the portion of the electronic message, a total number of the plurality of recipients who were determined as being unfamiliar with the portion of the electronic message.” Appeal Br. 9–10.

Appellant then argues,

the Examiner has not presented any explanation, with regard to the limitations at issue, as to why the combination of Cheung and Fiatal would teach anything different than what Fiatal teaches alone with regard to the limitations at issue. Therefore, the

Examiner has not established that the combination of Cheung and Fiatal teaches the limitations at issue.

Appeal Br. 11.

This argument is unpersuasive for the reasons set forth above. The Examiner has not relied upon Fiatal alone. Furthermore, the Examiner has established that Fiatal teaches the limitations for which Fiatal is relied upon—determining a number of a plurality of recipients that were determined as being unfamiliar with content of a message. To the extent Appellant disputes whether “unfamiliar” or “portion” are broad enough to include Fiatal’s “incorrect” answers to the “entire” question, we note that the Examiner relies on Cheung, not Fiatal, for teaching “identifying . . . whether the recipient is unfamiliar with a portion.” Ans. 4–5.

Appellant argues that the Examiner’s Response to Arguments in the Final Action does not sufficiently respond to arguments Appellant made in a prior Request for Reconsideration. Appeal Br. 11. We do not address this argument as we do not address on appeal, arguments contained in a prior Request for Reconsideration. We address arguments that Appellant presents in the Appeal Brief. “Except as provided for in §§ 41.41, 41.47, and 41.52, any arguments or authorities not included in the appeal brief will be refused consideration by the Board for purposes of the present appeal.” 37 C.F.R. § 41.37(c)(1)(iv); *see also* 37 C.F.R. § 41.41 (discussing the requirements of the Reply Brief); § 41.47 (discussing the requirements of oral hearings); § 41.52 (discussing the requirements of Rehearings).

Appellant argues that the Examiner’s motivation to combine the references, *as stated in a prior Office Action*, are improper. We do not address arguments concerning findings or determinations of prior Office Actions, as we are reviewing the findings and determinations of the Office



Action from which the present Appeal is taken. 37 C.F.R. § 41.31.

Appellant further argues that the Examiner’s Final Action from which the present appeal is taken, sets forth the following motivation: “it would have been obvious to make the combination ‘in order to aid in establishing consensus on a given issue using feedback, for example in a poll, to aid in a decision or inform an origin . . . entity about the entity’s audience.’” Appeal Br. 14 (citing Final Act. 6). Appellant argues, “the Examiner’s analysis begs the question as why ‘establishing consensus on a given issue using feedback,’ is relevant to the teaching of Cheung.” *Id.* Appellant also argues that “Cheung does not involve gathering information about the entity’s audience.” *Id.* at 15.

We disagree with this last assertion. As explained above, Cheung specifically discloses that the messaging protocol entails gathering information about the message sender’s audience and providing this information to the sender:

When the recipient selects text for translation as just described, feedback may be provided to the sender to notify the person or group of people that the recipient has difficulty understanding and requested annotation. This allows the sender to adjust the writing style to cater to the recipient better. The annotation may also provide for correction of spellings or other typographical errors and the addition of punctuation or other letters or figures within the text.

Cheung ¶ 33, *cited in* Final Act. 4–5.

Furthermore, we understand the Examiner’s stated motivation of “establishing consensus on a given issue using feedback” to mean that providing the speaker with feedback that includes objective statistics on the number of recipients who are having difficulty understanding portions of the message helps the speaker better understand how widespread the

communication gap is and how to best address this communication gap. We further understand the Examiner's position to be, then, and we agree, that providing Cheung's sender with feedback that additionally includes objective statistical data constitutes combining prior art elements according to known methods to yield predictable results. MPEP § 2143 I (A) (describing an exemplary rationale that may support a conclusion of obviousness). Providing this functionality also constitutes the use of a known technique to improve a similar method in the same way (MPEP § 2143 I C) or constitutes applying a known technique to a known method ready for improvement to yield predictable results (MPEP § 2143 I D).

For the foregoing reasons, Appellant does not persuade us of error in the Examiner's obviousness rejection of independent claim 25. We, therefore, affirm the Examiner's rejection of that claim and of claims 26, 27, and 30–42, which Appellant does not argue separately. Appeal Br. 9–16; *see* 37 C.F.R. § 41.37(c)(1)(iv) (“When multiple claims subject to the same ground of rejection are argued as a group or subgroup by appellant, the Board may select a single claim from the group or subgroup and may decide the appeal as to the ground of rejection with respect to the group or subgroup on the basis of the selected claim alone.”).

## CLAIM 28

### *The Claimed Subject Matter*

Appellant presents separate arguments for dependent claim 28. Claim 28 depends from claim 26, which in turn, depends from claim 25. Claims 26 and 28 read as follows:

26. The method of claim 25, wherein

a particular recipient from the plurality of recipients is identified as being unfamiliar with the portion of the electronic message based upon an agent within a computer device being accessed by the particular recipient.

28. The method of claim 26, wherein the agent is configured to:

identify a keyword being within the portion of the electronic message, and

identify the keyword being used in a communication application separate from the communication application in which the electronic message is received by the computer device being accessed by the particular recipient.

#### *Findings and Contentions*

The Examiner finds that Cheung teaches the additional language of claims 26 and 28. More specifically, the Examiner interprets Cheung as teaching the last limitation of claim 28: “[Cheung uses] subculture terms identified to determine sender and recipient culture as taught/suggested by analyzing sender and recipient subculture terms; potentially determined on a server in Cheung.” Appeal Br. 7 (citing Cheung ¶¶ 21, 32).

Appellant argues,

The claims contemplate the keyword being used (“being used” is present tense, which means a contemporaneous action) in “a communication application separate from the communication application in which the electronic message is received.” However, neither the Examiner’s analysis nor paragraphs [0021] and [0032] of Cheung refers to a separate communication application in which the keyword is being used. Also not referred to by Cheung is that an agent identifies this keyword being used by the separate communication application.

Thus, Cheung fails to teach the limitations in claim 28 for which Cheung alone is being relied upon to teach.

Appeal Br. 17.

The Examiner responds,

the cited prior art suggests the claimed limitations because Cheung appears to disclose program modules, servers, sender/receiver-side systems for performing a portion or all of the automated translation of unfamiliar terms and therefore at least a programming module separate from the communications application used to receive a message. . . .

Applicant discloses an agent separate from an e-mail client intended for use in scanning content in the background. . . . *Cheung discloses server, sender/recipient system may perform all or a portion of the functionality, automatically identify subculture terms based on learned differences between sender and recipient to automatically provide translation . . . .* Cheung acknowledges that any combination of program modules and entities can perform some or all of the functions in Cheung. Therefore, the prior art suggests that computer implemented functions can be practiced as any number of separate program modules. Furthermore, the plugins and program modules can each perform the role of an agent performing the functionality in the background.

Examiner's Answer mailed Mar. 27, 2019 ("Ans."), 12 (emphasis added) (citing Cheung ¶¶ 32, 34, 42).

The Examiner finds that there is no antecedent basis in the specification for "separate communications application." Ans. 13. As the Examiner makes this finding as part of the Examiner's support for the obviousness rejection, and not as part of any written-description rejection, we understand the Examiner to be noting that the Appellant has not acted as a lexicographer or disavowed claim scope, and thus supporting the rejection as using the broadest reasonable interpretation of the term. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005); MPEP 2111.01 IV.

*Analysis*

“Before considering the rejections . . . , we must first [determine the scope of] the claims . . . .” *In re Geerdes*, 491 F.2d 1260, 1262 (CCPA 1974). During examination of a patent application, pending claims are given their broadest reasonable construction consistent with the Specification. *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004); *In re Prater*, 415 F.2d 1393, 1404–05 (CCPA 1969).

We, therefore, review Appellant’s Specification to determine the meaning of the following language of claim 28: “identify the keyword being used in a communication application separate from the communication application in which the electronic message is received by the computer device being accessed by the particular recipient.” That is, we first consider what constitutes a separate communication application within the meaning of claim 28.

Appellant’s Specification indicates that the current invention is directed to a messaging application that involves either instant messaging or emailing. *See, e.g.*, Spec. ¶ 3 (discussing the functionality of instant messaging application); *id.* ¶ 6 (discussing emails messages); *id.* ¶ 13 (discussing multiple-person conversations held by either email or instant messaging); *id.* ¶ 14 (discussing notifications associated with “mail/message”). As such, we understand the claim term “electronic message” to be generic and include either an instant-messaging or email message.

Appellant explains the following point about the invention in the BRIEF SUMMARY section of the Specification:

Advantageously, the step of identifying that at least one recipient is unfamiliar with a portion of the message comprises identifying that the recipient has not previously received the portion. For example, the step of identifying that the recipient has not previously received the portion comprises accessing a record of keywords and/or phrases for the recipient. The information passed to the composer of the message does not have to be generated in response to an explicit action by a recipient of the message. For example, there may be in existence electronic resources that can be checked to see if a recipient is familiar with a keyword or phrase. *Such a resource may take the form of a record of keywords and phrases that are commonly found in messages received by the recipient, which is generated in the background as a user interface[] with their email client.* The absence of a keyword contained in a message from such a record may be taken to indicate that the intended recipient is unfamiliar with the keyword. Such a record may be accessed before the message has even been sent, or may be accessed locally once the message has been received by the recipient.

Spec. ¶ 16 (emphasis added).

Appellant re-explains this functionality in the DETAILED DESCRIPTION section of the Specification:

Alternatively [to realizing that the recipient is unfamiliar with a portion of a message by identifying explicit actions of a recipient], the step S3 of identifying that at least one recipient is unfamiliar with a portion of the message can comprise identifying that the recipient has not previously received the portion, for example by accessing a record of keywords and/or phrases for the recipient. As discussed above, with respect to Figure 4, for example, an agent on the recipient's computer could make a check against a record to see whether any of the terms used in the message are unknown to the recipient and feed this information back to the creator of the message. This could take

place in the background without the knowledge of the recipient of the message.

Spec. ¶ 37; *see also id.* ¶ 36 (discussing the alternative method in which the recipient expressly indicates unfamiliarity with a term).

Based on this disclosure, we find that this claim language means what it says—keywords being used are identified from a separate communication application, not merely earlier messages from the same communication application. Furthermore, independent claim 25, from which claim 28 depends, recites, “receiving an electronic message, sent by a sending client device *in an instant messaging session*, to a plurality or recipients.” Appeal Br. 21 (emphasis added). As such, the separate communication application recited in claim 28 cannot be the same instant-messaging application that carries out the method of claim 25. Consistent with the express language of the claim, the separate communication application must be some other messaging application, such as an email application that contains prior email records.

Turning to the rejection, the most relevant portion of Cheung that the Examiner cites reads as follows:

Another aspect of the invention relates to automatic learning by the system. In this regard, the system may monitor the dialog in the instant messaging session. Using active learning techniques known to those of skill in the art, the system may identify differences in the writing or speaking patterns of the sender and the recipient. The system may be able to identify the sender is a teenager who is using subculture jargon in the dialog. This may be accomplished for example by the use of subculture terms such as “brb” and “lol”. This may also be accomplished by the use of certain emoticons in the dialog. Similarly, *the system may identify that the recipient does not use such terms, or uses different subculture terms, wherein the system can learn or infer differences between the sender and*

*recipient*. If the system is set to utilize an automatic learning mode, the system then could automatically provide a translation and or adaptation to the text exchanged between the sender and the recipient. It is contemplated, that a feedback option is available wherein the sender or recipient may confirm that translation and annotation is desirable.

Cheung ¶ 34 (emphasis added), *cited in* Ans. 13.

Appellant’s arguments are persuasive, then, because the cited portions of Cheung merely disclose that “the system may monitor the dialog in the instant messaging session” and that the system may employ program modules. Cheung ¶¶ 32, 34. The cited passages of Cheung do not teach identifying keywords that are being used *specifically in separate communication applications*. Cheung appears to be silent as to what sources or methods that system uses to learn or infer language differences or whether information from separate applications may be gathered and analyzed. As such, the Examiner has not established a *prima facie* case of obviousness in relation to claim 28.

## CLAIM 29

### *The Claimed Subject Matter*

Appellant also presents separate arguments for dependent claim 29. Claim 29 also depends from claim 26. Claim 29 read as follows, with formatting modified:

29. The method of claim 26, wherein the agent is configured to:
  - identify a keyword being within the portion of the electronic message, and
  - detect information regarding the keyword is being gathered by the computer device being accessed by the particular recipient.



*Determinations and Contentions*

The Examiner interprets Cheung as teaching this claim language: “[Cheung teaches] gathering information on a keyword as taught/suggested by defining a keyword by gathering information from internet.” Final Act. 8 (citing Cheung ¶ 29). The Examiner further reasons,

Cheung discloses that the recipient can select the text[,] which may request a link to web data based on the selected text. . . . Based on the selection of the text for translation, feedback is provided to the sender. Clearly, Cheung has determined that the user and/or computing device is attempting to gather more information on the selected terms because the feedback is responsive to an explicit user action regarding the unfamiliar text.

Ans. 14 (citing Cheung ¶ 32).

Appellant argues,

While the Examiner’s cited passage refers to “use of standard HTML links such as a button for more information 326,” which could be considered as a mechanism for gathering information, the claims requires that the agent detects both the keyword and the gathering of information regarding the keyword. The fact that information is gathered does not necessarily (i.e., inherently) require that an agent detects this keyword and the gathering. Thus, Cheung fails to teach the limitations in claim 29 for which Cheung alone is being relied upon to teach.

Appeal Br. 17–18.

*Analysis*

The relied upon passage of Cheung reads as follows:

Also shown in window 302 in FIG. 3B, is a description of the medicine from which is shown Ultram and all hydrochloride 330. Furthermore, *the system* in this example *has accessed the Internet, and queried the Internet to produce information* presented in the form of data from the webMD.com Website 324.

*This information may be tailored by the data base and presented to the recipient and such a manner is to assist in understanding the jargon or abbreviation typed in by the doctor. The use of standard HTML links such as a button for more information 326 may also be employed. Therefore, the recipient may engage in a multimedia interactive experience as part of the dialog.*

....

The recipient may also select how the translations and or annotation occurs. For example, the recipient may be an adult and in the course of an instant messaging session may see subculture abbreviations that the recipient does not understand. There may be an option presented wherein the recipient can request a translation and annotation *[that] instructs the system to make a translation of those subculture terms.* This may involve the recipient identifying what terms are unfamiliar wherein the system automatically identifies the difference between the sender and the recipient. In this regard if the recipient identifies the term “lol” as being unfamiliar, the system may be able to infer that the sender is a teenager and a recipient is an adult and make translations accordingly. The request by the recipient (or the sender) may be requested explicitly and interactively regarding what is to be annotated. For example, *the recipient can select the text that requires annotation and press a button or click an icon on the user interface to achieve the annotation or translation. The recipient may also request a link to web data based on the selected text.*

Cheung ¶¶ 29, 32 (emphasis added), *cited in* Final Act. 8; Ans. 14.

These cited passages of Cheung do not merely teach that the recipient may perform an internet search for an unknown term. Rather, these passages further teach that the recipient clicks on buttons, icons, or hyperlinks that are provided by the system, and the system performs an internet search for the recipient. Cheung ¶¶ 29, 32. Furthermore, the system then provides the information to the system, optionally doing so after tailoring the information with the aid of information stored in the system’s database. *Id.* ¶ 29.

Accordingly, Appellant has not established error in the Examiner's obviousness rejection of dependent claim 29.

### CONCLUSIONS

We affirm the obviousness rejection of claims 25–27, 30–42.

We affirm the separately argued obviousness rejection of dependent claim 29.

We reverse the separately argued obviousness rejection of dependent claim 28.<sup>2</sup>

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<sup>2</sup> We decline to exercise our discretionary authority under 37 C.F.R. § 41.50(b) to issue a new ground of rejection under 35 U.S.C. § 101 on the basis of the claims being directed to an exception to patent-eligible subject matter (an abstract idea) without reciting significantly more. Our decision declining to exercise our discretionary authority should not be viewed, though, as an implicit determination that the claims integrate the recited abstract ideas into a practical application within the meaning of the USPTO's 2019 Revised Patent Subject Matter Eligibility Guidance. 84 Fed. Reg. 50 (Jan. 7, 2019), *updated by* USPTO, *October 2019 Update: Subject Matter Eligibility* (available at [https://www.uspto.gov/sites/default/files/documents/peg\\_oct\\_2019\\_update.pdf](https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf)). Upon any further prosecution on the merits, the Examiner may wish to consider whether the claims, particularly including claims 25 and 28, recite and merely are directed to various abstract ideas such as (1) certain methods of organizing human activity including interactions between people that entail teaching and (2) mathematical concepts that entail mathematical calculations. *See, e.g., Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016) (holding that abstract ideas include the concepts of collecting information, analyzing the information, and displaying the results). The Examiner also may wish to consider whether the additional elements beyond the abstract idea merely constitute insignificant extra-solution activity such as gathering and transmitting data using well-understood, routine, and conventional computer components.

DECISION SUMMARY

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
25-42	103	Cheung, Fialal	25-27, 29-42	28

TIME PERIOD FOR RESPONSE

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

AFFIRM IN PART