

**REMARKS**

Favorable reconsideration of this application is respectfully requested in view of the claim amendments and following remarks.

*Status of Claims*

Claims 1, 11, 17, and 19 are amended.

Claims 2, 5-6, 12, and 15-16 were previously canceled without prejudice or disclaimer of the subject matter contained therein.

Claims 1, 3-4, 7-11, 13-14, and 17-21 are pending in the application of which claims 1 and 11 are independent.

Claims 1, 3-4, 7-11, 13-14, and 17-21 are rejected.

No new matter has been introduced by way of the amendments above. Entry thereof is therefore respectfully requested.

*Examiner Interview*

At the outset, Applicant thanks the Examiner for the courtesies extended during the interview on April 10, 2020. Agreement was reached with respect to the rejection under 35 U.S.C. § 112, first paragraph (written description). The Examiner acknowledged that this rejection was issued in error and should have been withdrawn earlier. Although agreement was not reached with regard to allowability, the Examiner discussed with Applicant ways to overcome the rejections under 35 U.S.C. § 101 (subject matter eligibility) and § 103 (obviousness). Specifically, the

Examiner acknowledged that the amendments and arguments made herein would potentially overcome the rejections and necessitate further search and consideration.

*Summary of the Office Action*

Claims 1, 3-4, 7-11, 13-14, and 17-21 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement.

Claims 1, 3-4, 7-11, 13-14, and 17-21 are rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter.

Claims 1, 3-4, 7-8, 10-11, 13-14, 17-18, and 20 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent Application Publication No. 2017/0262880 to Cook (hereinafter “Cook”) in view of U.S. Patent Application Publication No. 2009/0216616 to Wang, et al. (hereinafter “Wang”), U.S. Patent Application Publication No. 2011/0231239 to Burt, et al. (hereinafter “Burt”), U.S. Patent Application Publication No. 2010/0138294 to Bussmann, et al. (hereinafter “Bussmann”), U.S. Patent Application Publication No. 2011/0302025 to Hsiao, et al. (hereinafter “Hsiao”), and further in view of U.S. Patent Application Publication No. 2015/0348119 to Ferber, et al. (hereinafter “Ferber”).

Claims 9 and 19 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Cook in view of Wang, Burt, Bussmann, Hsiao, Ferber, and further in view of U.S. Patent Application Publication No. 2016/0140603 to Kawamura, et al. (hereinafter “Kawamura”).

Claim 21 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Cook in view of Wang, Burt, Bussmann, Hsiao, Ferber, and further in view of U.S. Patent Application Publication No. 2011/0225035 to Patwa, et al (hereinafter “Patwa”).

The rejections above are respectfully traversed for at least the reasons set forth below.

*Claim Rejection Under 35 U.S.C. § 112, 1<sup>st</sup> Paragraph*

Claims 1, 3-4, 7-11, 13-14, and 17-21 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement.

During the interview with the Examiner conducted on April 10, 2020, agreement was reached with respect to this rejection. The Examiner acknowledged that this rejection was issued in error and should have been withdrawn earlier.

In view of the foregoing, Applicant respectfully requests that the aforementioned written description rejection of claims 1, 3-4, 7-11, 13-14, and 17-21 be withdrawn.

*Claim Rejection Under 35 U.S.C. § 101*

Claims 1, 3-4, 7-11, 13-14, and 17-21 are rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter.

During the interview with the Examiner conducted on April 10, 2020, the Examiner kindly pointed to the January 2019 updated patent eligibility guidelines (“2019 PEG”) and stressed the importance of clarifying how the claimed invention can be integrated into a “practical application,” according to the requirements of the Step 2A, prong 2. More specifically, the Examiner asked Applicant to highlight portions of the specification and better explain how the claimed invention improves upon the existing technology or technical field. *See* MPEP 2106.05(a).

Responsive to the Examiner’s request, Applicant demonstrates below how the claimed invention can be integrated into a “practical application” to meet and satisfy the requirements of

the Step 2A, prong 2. That said, it should be appreciated that a full analysis of patent eligibility should still be addressed. After all, Applicant believes that the claimed invention satisfies all the eligibility requirements and that this rejection should be withdrawn for all the reasons presented below.

Summary of Eligibility Requirements

The USPTO issued the 2019 Revised Patent Subject Matter Eligibility Guidance (hereinafter the “2019 PEG”) for determining subject matter eligibility, and these guidelines became effective January 7, 2019. *See* USPTO's January 7, 2019 Memorandum, 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019). Furthermore, the USPTO recently issued the October 2019 Patent Eligibility Guidance Update (hereinafter the “October 2019 Update”) on October 18, 2019 to include a new set of examples and a discussion of various issues raised by public comments.

Under the 2019 PEG and the October 2019 Update, we first look to whether the claim recites:

(1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human interactions such as a fundamental economic practice, or mental processes); and

(2) additional elements that integrate the judicial exception into a practical application (see MPEP § 2106.05(a)-(c), (e)-(h)). *See* 2019 PEG at 52, 55-56.

Only if a claim (1) recites a judicial exception, and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that are not "well-understood, routine, conventional" in the field (see MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. *See* 2019 Guidance at 56.

Furthermore, the 2019 PEG "extracts and synthesizes key concepts identified by the courts as abstract ideas to explain that the abstract idea exception includes the following groupings of subject matter, when recited as such in a claim limitation(s) (that is, when recited on their own or per se)":

(a) Mathematical concepts-mathematical relationships, mathematical formulas or equations, mathematical calculations;

(b) Certain methods of organizing human activity 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); and

(c) Mental processes----concepts performed in the human mind (including an observation, evaluation, judgment, opinion). *Id.* at 52.

The remarks below pertain to the required analysis as set forth in the 2019 PEG and the October 2019 Update as is summarized above. The remarks below further address remarks presented by the Examiner in the Office Action.

Step 2A, Prong 1 Analysis

The Examiner asserts that, regarding **Step 2A, Prong 1**, claims 1, 3-4, 7-11, 13-14, and 17-21 are directed toward a "judicial exception (i.e. an abstract idea)." *See* Office Action at 2-3. More

specifically, the Office Action alleges that the “limitations, as drafted constitute a process that, under its broadest reasonable interpretation, covers commercial activity, but for the recitation of generic computer components...comparable to an advertising, marketing process, i.e. a process aimed at attributing sales (i.e. offline conversions) to online sponsored content (i.e. advertising)...[which] falls within the ‘Certain Methods of Organizing Human Activity – Commercial or Legal Interactions (e.g., agreements in form of contracts, legal obligations, advertising, marketing, sales activities or behaviors, business relationships)’ grouping of abstract ideas.” *See* Office Action at 3.

In the October 2019 Update, page 16, the USPTO states, “First, the rejection should identify the judicial exception (i.e., abstract idea enumerated in Section I of the 2019 PEG, laws of nature, or a natural phenomenon) by referring to what is recited (i.e., set forth or described) in the claim and explaining why it is considered to be an exception (Step 2A Prong One). ... For abstract ideas, the rejection should explain why a specific limitation(s) recited in the claim falls within one of the enumerated groupings of abstract ideas (i.e., mathematical concepts, mental processes, or certain methods of organizing human activity)” (Emphasis added).

First, the Examiner only generally states that “generic computers” are used and appears to only refer to the specification, rather than the claims themselves. Therefore, the Examiner’s analysis is erroneous and fails to follow the guidelines set forth by the USPTO. The claims plainly do not recite any “contract,” “legal obligations,” or “business relationships.” Therefore, the Examiner’s analysis for Step 2A, Prong One based on what appears to be directed to the specification, and not the claims themselves, is improper.

Second, the Examiner alleges that the claims are directed to certain methods of organizing human activity, such as commercial or legal interactions. However, the Examiner fails to provide any more detail to his position. The claims, rather, are directed to tracking user response to content presented to a use, especially in scenarios where users do so indirectly via a third party system or in an offline manner. In other words, the claimed system tracks user offline response in real-time by using offline conversion data from third parties, and does not recite any features related to an agreement in the form of contract or legal obligations, advertising, marketing or sales activities, or business relations. More specifically, claim 1 recites “extending, by an online system, an application programming interface (API) for access by a third party system, the application, the API including one or more hypertext transport protocol (HTTP) based commands that allow the third party system to transmit offline conversions data to an online system, the offline conversion data including an indication of an action performed by the offline user that is not directly trackable,” “receiving, at the online system from the third party system, an HTTP message with a function call of the API, the function call including instructions to add offline conversion data for an offline user, the offline conversion data received in realtime as the actions of the offline conversions are completed, each entry of the received offline conversion data including comprising at least one of the following identifying information: an indication of the third party system, an indication of a type of action performed by the offline user, a timestamp for the action, and metadata associated with revenue or profit generated by the action, a value score of the action to the third party system, wherein the identifying information for the offline user is hashed for security,” and “identifying a local user matching the offline user by matching identifying information of the local user with the identifying information of the offline user received in offline

conversion data entry from the API function call, wherein the matching is based on: assigning a confidence score to a match between the local user and the offline user, and determining whether the confidence score meets a predetermined threshold,” and “storing, at the online system, the offline conversion data entry for the identified local user.” These are not forms of contract or legal obligations, advertising, sales activities, or business relations.

Therefore, contrary to the assertion by the Examiner, independent claim 1 does not recite an abstract idea that can be characterized as a commercial interaction or business relation. Based on at least the foregoing reasons, the features recited in independent claim 1 are **not** directed to an abstract idea grouping of certain methods of organizing human activity.

#### Step 2A, Prong 2 Analysis

Regarding **Step 2A, prong 2**, the Examiner asserts that the judicial exception of independent claim 1, for example, is not integrated into a practical application. However, even assuming that the claimed features are directed to an abstract idea, which Applicant does not so concede, the Applicant submits that the claimed invention nevertheless satisfies prong two of Step 2A analysis under the 2019 PEG. *See* 2019 PEG at 54.

The 2019 PEG indicates that, in prong 2, examiners should evaluate whether the claim as a whole integrates the recited judicial exception into a practical application of the judicial exception. *Id.* A claim that integrates a judicial exception into a practical application will 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 to monopolize the judicial exception. *Id.*



In addition and more specifically, on page 12 of the October 2019 Update, the USPTO states,

An important consideration to evaluate when determining whether the claim as a whole integrates a judicial exception into a practical application is whether the claimed invention improves the functioning of a computer or other technology. ... In short, first the specification should be evaluated to determine if the disclosure provides sufficient details such that one of ordinary skill in the art would recognize the claimed invention as providing an improvement. The specification need not explicitly set forth the improvement, but it must describe the invention such that the improvement would be apparent to one of ordinary skill in the art. ... ***Second, if the specification sets forth an improvement in technology, the claim must be evaluated to ensure that the claim itself reflects the disclosed improvement.*** (Emphasis added)

On pages 12 and 13 of the October 2019 Update, the USPTO states,

That is, the claimed invention may integrate the judicial exception into a practical application by demonstrating that it **improves the relevant existing technology although it may not be an improvement over well-understood, routine, conventional activity**.

Consideration of improvements is relevant to the integration analysis regardless of the technology of the claimed invention. That is, the consideration applies equally whether it is a computer-implemented invention, an invention in the life sciences, or any other technology. (Emphasis added).

In this case, independent claim 1 recites, *inter alia*,

extending, by an online system, an application programming interface (API) for access by a third party system, the application, the API including one or more hypertext transport protocol (HTTP) based commands that allow the third party system to transmit offline conversions data to an online system, the offline conversion data including an indication of an action performed by the offline user that is not directly trackable;

receiving, at the online system from the third party system, an HTTP message with a function call of the API, the function call including instructions to add offline conversion data for an offline user, the offline conversion data received in realtime as the actions of the offline conversions are completed, each entry of the received offline conversion data comprising at least one of the following identifying information: an indication of the third party system, an indication of a type of action

performed by the offline user, a timestamp for the action, and metadata associated with revenue or profit generated by the action, a value score of the action to the third party system, wherein the identifying information for the offline user is hashed for security;

identifying a local user matching the offline user by matching identifying information of the local user with the identifying information of the offline user received in offline conversion data entry from the API function call, wherein the matching is based on:

assigning a confidence score to a match between the local user and the offline user, and

determining whether the confidence score meets a predetermined threshold

...

determining an attribution amount of the offline conversion for each of the one or more sponsored content items that is inversely proportional to the time between a timestamp of the impression opportunity of the sponsored content item and a timestamp of an occurrence of the offline conversion;

computing an updated bid value for each of the one or more sponsored content items for the identified local user, the updated bid value increased or decreased based on the corresponding attribution amounts for that sponsored content item, the updated bid value computed by the online system when submitting the sponsored content item for impression opportunities for the identified local user. (Emphasis added).

As such, independent claim 1 recites a method of tracking user response to content presented to a user, even in situations where some users may act upon content indirectly, e.g., via a third party system or in an offline manner. Specifically, the method recited in claim 1 collects offline conversion data that includes an indication of an action performed by the offline user that is not directly trackable by, among other things, matching identifying information of the local user with the identifying information of the offline user by assigning a confidence score to a match between the local user and the offline user, and determining whether the confidence score meets a

predetermined threshold. Using this information, the method of claim 1 computes an updated bid value for each of the one or more sponsored content items for the identified local user, the updated bid value increased or decreased based on the corresponding attribution amounts for that sponsored content item. Existing technology has no adequate solution for this, especially in the novel and nonobvious ways recited by the claimed invention.

According to the specification, these improvements to the field of digital content management and advertisement technology are described in at least paragraphs [0004] and [0062]-[0064] of the specification, which state:

The online system receives information about actions performed by users at the online system that may not be directly trackable, such as a transaction made at a physical location. This is in contrast to actions that may be directly trackable, such as one made at a website of the third party system. By using such a method, the online system is able to more accurately determine the effects of providing sponsored content from the third party systems and the benefits provided to the third party systems by the sponsored content. While previously the offline conversion information may not be accurately determined, and thus a large portion of the effect of the sponsored content may not be measured accurately, by having the offline conversions information be gathered and reported in real-time, the online system is able to more accurately present the information to the third party system, allowing the third party system to better understand the effects of its sponsored content...

As noted above, the system as described here has many advantages compared to a traditional method. Previously, a system may not have been easily able to determine the effects of offline conversions. At most, a system may have performed a simple lift analysis much later on, and after the fact, to determine in the aggregate an approximate effect on offline conversions. However, without being able to provide information regarding the effects of offline conversions in a timely fashion, the information is not significantly useful to a third party system 130.

Instead, as described here, by providing the information in (near) real-time, the third party systems 130 may quickly adjust for and react to the changes in user response to sponsored content. Furthermore, as described in further detail below, the receipt of offline conversions information allows for more accurate tracking of users' actions, based on an actual occurrence of the action, rather than an estimation or guess that the action may have occurred.

For example, in the case of deferred payments, a user may have reached a payment instruction web page requesting the user to remit payment to a particular bank account. If the online system 140 were to track the user's actions only up to this web page, the information gathered by the online system 140 may not be accurate, as many users may not actually transfer payment subsequently to the particular bank account. Instead, by receiving the offline conversion information regarding payments to the bank account from the third party system 130, the online system 140 is able to gather much more accurate information regarding user behavior, and pass this information back to the third party system 130. (Emphasis added).

Thus, the features recited above in independent claim 1 clearly provide an improvement in the field of computer-related digital content management and advertisement technology, and thereby properly integrate the alleged abstract idea into a “practical application,” as required by Step 2A, prong 2.

Moreover, the features recited in independent claim 1, including “the function call including instructions to add offline conversion data for an offline user, the offline conversion data received in realtime as the actions of the offline conversions are completed, each entry of the received offline conversion data comprising at least one of the following identifying information: an indication of the third party system, an indication of a type of action performed by the offline user, a timestamp for the action, and metadata associated with revenue or profit generated by the action, a value score of the action to the third party system, wherein the identifying information for the offline user is hashed for security,” and “identifying a local user matching the offline user by matching identifying information of the local user with the identifying information of the offline user received in offline conversion data entry from the API function call, wherein the matching is based on: assigning a confidence score to a match between the local user and the offline user, and determining whether the confidence score meets a predetermined threshold,” plainly show that the

claim recites meaningful limitations of the invention, beyond generally linking the use of an abstract idea to a particular technological environment.

As such, the features recited in independent claim 1 more than adequately integrate a judicial exception (if any) into a practical application in accordance with the 2019 PEG and the October 2019 Update. Therefore, independent claim 1 is **not** directed to an abstract idea.

Independent claim 11 recites similar features as independent claim 1. Thus, independent claim 11 is also **not** directed to an abstract idea, nor any intervening dependent claim that depends on these independent claims.

#### Step 2B Analysis

Notwithstanding that the claims are believed not to be directed to an abstract idea and accordingly the rejection under 35 U.S.C. §101 must be withdrawn, under Step 2B, even if a claim is directed to an abstract idea, the claim is only patent ineligible if the claim elements fail to recite “nothing significantly more” than the abstract idea itself. Here, the claims recite “significantly more” than an abstract idea. The Examiner does not appear to disagree.

Regarding step 2B, the 2019 PEG states, “the Federal Circuit has held claims eligible at the second step of the Alice/Mayo test (USPTO Step 2B) because the additional elements recited in the claims provided “significantly more” than the recited judicial exception (e.g., because the additional elements were unconventional in combination).” *See* 2019 PEG at 56.

In this case, independent claim 1 recites, *inter alia*,

extending, by an online system, an application programming interface (API) for access by a third party system, the application, the API including one or more hypertext transport protocol (HTTP) based commands that allow the third party

system to transmit offline conversions data to an online system, the offline conversion data including an indication of an action performed by the offline user that is not directly trackable;

receiving, at the online system from the third party system, an HTTP message with a function call of the API, the function call including instructions to add offline conversion data for an offline user, the offline conversion data received in realtime as the actions of the offline conversions are completed, each entry of the received offline conversion data comprising at least one of the following identifying information: an indication of the third party system, an indication of a type of action performed by the offline user, a timestamp for the action, and metadata associated with revenue or profit generated by the action, a value score of the action to the third party system, wherein the identifying information for the offline user is hashed for security;

identifying a local user matching the offline user by matching identifying information of the local user with the identifying information of the offline user received in offline conversion data entry from the API function call, wherein the matching is based on:

assigning a confidence score to a match between the local user and the offline user, and

determining whether the confidence score meets a predetermined threshold

...

determining an attribution amount of the offline conversion for each of the one or more sponsored content items that is inversely proportional to the time between a timestamp of the impression opportunity of the sponsored content item and a timestamp of an occurrence of the offline conversion.

As shown above and below in the arguments against the § 103 rejection, the combination of features recited above in independent claims 1 and 11, for example, is not taught or suggested by the prior art. In fact, these limitations and features are clearly directed to additional elements that are unconventional in combination. As such, the combination of features recited in independent claims 1 and 11 constitute a non-conventional and non-generic arrangement of the

additional elements recited in the claims. Accordingly, based on the 2019 PEG, the additional features recited above amount to significantly more than an abstract idea.

In view of the foregoing, the claims 1, 3-4, 7-11, 13-14, and 17-21 are **not** directed to an abstract idea, and/or amount to significantly more than an abstract idea, and, as such, the rejection under 35 U.S.C. §101 should be withdrawn.

*Claim Rejections Under 35 U.S.C. § 103(a)*

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007):

“Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” Quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966).

As set forth in MPEP 2143.03, to ascertain the differences between the prior art and the claims at issue, “[a]ll claim limitations must be considered” because “all words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385. According to the Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in view of *KSR International Co. v. Teleflex Inc.*, Federal Register, Vol. 72, No. 195, 57526, 57529 (October 10, 2007), once the *Graham* factual inquiries are resolved, there must be a

determination of whether the claims would have been obvious to one of ordinary skill in the art based on any one of the following proper rationales:

(A) Combining prior art elements according to known methods to yield predictable results; (B) Simple substitution of one known element for another to obtain predictable results; (C) Use of known technique to improve similar devices (methods, or products) in the same way; (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results; (E) “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007).

Furthermore, as set forth in *KSR International Co. v. Teleflex Inc.*, quoting from *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006), “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasonings with some rational underpinning to support the legal conclusion of obviousness.”

Therefore, if the above-identified criteria and rationales are not met, then the cited reference(s) fails to render the claims obvious and, thus, the claims are distinguishable over the cited reference(s).

**Claims 1, 3-4, 7-8, 10-11, 13-14, 17-18, and 20**

Claims 1, 3-4, 7-8, 10-11, 13-14, 17-18, and 20 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Cook in view of Wang, Burt, Bussmann, Hsiao, and further in view of Ferber.



Regarding independent claim 1, the Examiner asserts that the claimed invention would have been obvious in view of the six-reference combination of Cook, Wang, Burt, Bussmann, Hsiao, and Ferber. Applicant respectfully disagrees. However, in order to forward the present application toward allowance, Applicant has amended claim 1 to more specifically define the claimed invention, and specifically those features that further differentiate the claimed invention from Cook, Wang, Burt, Bussmann, Hsiao, and/or Ferber, as well as the other cited references.

In particular, Applicant respectfully submits that Cook, either alone or in combination with Wang, Burt, Bussmann, Hsiao, and Ferber, fails to disclose, or even suggest, a “method” comprising “receiving, at the online system from the third party system, an HTTP message with a function call of the API, the function call including instructions to add offline conversion data for an offline user, the offline conversion data received in realtime as the actions of the offline conversions are completed, each entry of the received offline conversion data comprising at least one of the following identifying information: an indication of the third party system, an indication of a type of action performed by the offline user, a timestamp for the action, and metadata associated with revenue or profit generated by the action, a value score of the action to the third party system, wherein the identifying information for the offline user is hashed for security,” and “identifying a local user matching the offline user by matching identifying information of the local user with the identifying information of the offline user received in offline conversion data entry from the API function call, wherein the matching is based on: assigning a confidence score to a match between the local user and the offline user, and determining whether the confidence score meets a predetermined threshold,” as presently claimed. Support for this amendment may be found in at least paragraphs [0039], [0042], [0045], and [0073] of the specification.

In contrast, Cook is focused on proximity detection. The Examiner acknowledges that Cook does not teach each and every feature of claim 1, and therefore relies on the secondary references of Wang, Burt, Bussmann, Hsiao, and Ferber to teach these missing limitations. However, nothing in any of these secondary references teach or render obvious “offline conversion data comprising at least one of the following identifying information: an indication of the third party system, an indication of a type of action performed by the offline user, a timestamp for the action, and metadata associated with revenue or profit generated by the action, a value score of the action to the third party system, wherein the identifying information for the offline user is hashed for security,” and “identifying a local user matching the offline user by matching identifying information of the local user with the identifying information of the offline user received in offline conversion data entry from the API function call, wherein the matching is based on: assigning a confidence score to a match between the local user and the offline user, and determining whether the confidence score meets a predetermined threshold,” as presently claimed. In fact, nothing in any of these references even mentions these features or limitations, and the Examiner as acknowledged as such in the interview conducted on April 10, 2020. Therefore, Wang, Burt, Bussmann, Hsiao, and Ferber do not cure the deficiencies of Cook.

Even assuming, for the sake of argument, that Wang, Burt, Bussmann, Hsiao, and Ferber teach the missing elements and therefore cures the deficiencies of Cook, which Applicant does not so concede, there would still be no rationale of obviousness to combine the references. The combination of these six references is clearly based on classic improper hindsight. The Examiner alleges that “it would have been obvious to one of ordinary skill in the art...to combine the teachings” of each of these secondary references to the primary reference, but fails say why or how

this would work. Merely stating that it would have been obvious, without any evidence or explanation, and citing what each reference can do on its own, is not a proper basis for obviousness.

In fact, the combination that is proposed by the Examiner could not happen without violating the purpose or principle of each of the systems. For example, the Cook is focused on proximity detection. By contrast, Burt is directed to identifying and crediting interactions that lead to a conversion.” In other words, none of the “conversion metrics” or described by Burt have anything to do with physical movement or location, but rather to other influencing actions such as “recency of interaction.” See Burt at [0009]. Therefore, to combine Burt’s *time-based conversion* system with that of Cook’s would necessarily violate Cook’s *physical location detection* system, and vice versa.

Accordingly, Applicant respectfully submits that claim 1 should be allowable over the six-reference combination of Cook, Wang, Burt, Bussmann, Hsiao, and Ferber as set forth above.

Regarding claims 11, while different in overall scope from claim 1, this claims recites subject matter related to claim 1. Thus, the arguments set forth above with respect to claim 1 are equally applicable to claim 11. Accordingly, Applicant respectfully submits that claims 11 should be allowable over Cook, Wang, Burt, Bussmann, Hsiao, and Ferber for analogous reasons as set forth above with respect to claim 1.

Regarding claims 3-4, 7-8, 10, 13-14, 17-18, and 20, these claims are dependent upon independent claim 1 or 11. Thus, since independent claims 1 and 11 should be allowable as discussed above, claims 3-4, 7-8, 10, 13-14, 17-18, and 20 should also be allowable at least by virtue of their dependency on independent claim 1 or 11. Moreover, these claims recite additional

features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

In view of the foregoing, Applicant respectfully requests that the aforementioned obviousness rejection of claims 1, 3-4, 7-8, 10-11, 13-14, 17-18, and 20 be withdrawn.

**Claims 9 and 19**

Claims 9 and 19 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Cook in view of Wang, Burt, Bussmann, Hsiao, Ferber, and further in view of Kawamura.

Applicant respectfully submits that the aforementioned obviousness rejection of claims 9 and 19 has become moot in view of the deficiencies of the primary references (i.e., Cook, Wang, Burt, Bussmann, Hsiao, and Ferber) as discussed above with respect to independent claims 1 and 11. That is, claims 9 and 19 are dependent upon independent claim 1 or 11 and thus inherently incorporate all of the limitations of independent claim 1 or 11. Also, the secondary reference (i.e., Kawamura) fails to disclose, or even suggest, the deficiencies of the primary references as discussed above with respect to independent claim 1 or 11. Indeed, the Examiner does not even assert such. Thus, the combination of the secondary reference with the primary references also fails to disclose, or even suggest, the deficiencies of the primary references as discussed above with respect to independent claims 1 and 11. Accordingly, claims 9 and 19 should be allowable over the combination of the secondary reference with the primary references at least by virtue of its/their dependency on independent claim 1 or 11. Moreover, claims 9 and 19 recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

In view of the foregoing, Applicant respectfully requests that the aforementioned obviousness rejection of claims 9 and 19 be withdrawn.

**Claim 21**

Claim 21 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Cook in view of Wang, Burt, Bussmann, Hsiao, Ferber, and further in view of Patwa.

Applicant respectfully submits that the aforementioned obviousness rejection of claim 21 has become moot in view of the deficiencies of the primary references (i.e., Cook, Wang, Burt, Bussmann, Hsiao, and Ferber) as discussed above with respect to independent claim 11. That is, claim 21 is dependent upon independent claim 11 and thus inherently incorporate all of the limitations of independent claim 11. Also, the secondary reference (i.e., Patwa) fails to disclose, or even suggest, the deficiencies of the primary references as discussed above with respect to independent claim 11. Indeed, the Examiner does not even assert such. Thus, the combination of the secondary reference with the primary references also fails to disclose, or even suggest, the deficiencies of the primary references as discussed above with respect to independent claim 11. Accordingly, claim 21 should be allowable over the combination of the secondary reference with the primary references at least by virtue of its/their dependency on independent claim 1 or 11. Moreover, claim 21 recites additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

In view of the foregoing, Applicant respectfully requests that the aforementioned obviousness rejection of claim 21 be withdrawn.

**PATENT**

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Conclusion

In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited. Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below. Please grant any required extensions of time and charge any fees due in connection with this request to Deposit Account No. 50-3290.

Respectfully submitted,

Dated: April 30, 2020

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