

REMARKS

The Office Action dated March 18, 2019 has been carefully reviewed, and the foregoing Amendment and following remarks have been made in consequence thereof.

Claims 1, 2, 5, 6, 9-19, 21, and 22 are now pending in this application. Claims 1, 2, 5, 6, 9-19, 21, and 22 stand rejected. Claim 11 is amended herein. Support for these amendments can be found at least at paragraph [0057] and Fig. 6 of the published application. No new matter is added.

Examiner Interview Summary

Applicant thanks Examiner Khattar for the courtesies shown to Applicant's representative during the June 5, 2019 interview. During the interview, Applicant's representative and the Examiner discussed the pending Section 101 rejection, which is the only remaining rejection. No agreement was reached regarding the subject matter eligibility of independent Claim 1. However, the Examiner indicated that dependent Claim 11 may be directed to patent-eligible subject matter. This response is made in furtherance of that discussion.

Rejection under 35 U.S.C. §101

Claims 1, 2, 5, 6, 9-19, 21, and 22 are rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. Applicant traverses this rejection. Specifically, Applicant submits the pending claims are patentable under the 2019 PEG.

The 2019 PEG provides a framework for the USPTO to evaluate, at Step 2A, whether the claims are "directed to" an abstract idea. The procedure focuses on two prongs: (1) whether the claim recites a judicial exception, and (2) if so, whether the recited judicial exception is integrated into a practical application. *See* 2019 PEG.

Under the framework established by the 2019 PEG, the pending claims are not directed to an abstract idea. The First Prong of Step 2A requires identification of specific limitations (individually or in combination) in the claim under examination that fall within at least one of

three subject matter groupings of abstract ideas: mathematical concepts, certain methods of organizing human activity, and mental processes. *See* 2019 PEG.

Here, the pending claims do not recite an abstract idea. For example, Claim 1 recites a method for conducting a transaction between a merchant and a customer, the method including “broadcasting, from a merchant device to a customer device, information identifying the merchant device while the merchant device and the customer device are both located at a physical merchant location to cause the broadcast information to be displayed on the customer device, wherein the merchant device includes one or more point of sale (POS) terminals . . . receiving, at the merchant device from the customer device, a connection request to initiate a connection between the merchant device and the customer device . . . in response to the received connection request, exchanging encryption keys between the merchant device and the customer device to establish a secure wireless channel between the merchant device and the customer device . . . receiving, over the secure wireless channel, at the merchant device, a check-in request from the customer device, the check-in request including information identifying the customer . . . prompting the merchant to accept the check-in request by displaying a message on the merchant device . . . accepting, at the merchant device, the check-in request based on an input made by the merchant on the merchant device in response to the displayed message . . . generating, as a result of acceptance of the check-in request, cart information of the customer at the merchant device, the cart information generated based on data inputted by the merchant into the merchant device, the cart information representing details of items being purchased . . . transmitting, by the merchant device, the cart information to the customer device to cause the cart information to be displayed on the customer device prior to initiating a payment process for the items and while the customer device is located at the physical merchant location, and to cause the cart information to be synchronized in real-time between the merchant device and the customer device while the customer is present at the physical merchant location . . . determining, via the secure wireless channel, at least one payment option for checking out the items corresponding to the cart information . . . and processing, over the secure wireless channel established between the merchant device and the customer device, a payment associated with the cart information based on a selected payment option out of the at least one payment option.”

At page 3 of the Office Action, the Office asserts that the claims recite certain methods of organizing human activity. Applicant respectfully disagrees. Specifically, Applicant submits that none of the recitations of independent Claims 1, 17, and 18 can be performed mentally, recite nothing more than mathematical concepts, or are reasonably categorized as methods of organizing human activity.

For example, the pending claims recite specific functions that cannot be performed mentally (i.e., i) broadcasting, from a merchant device to a customer device, information identifying the merchant, ii) receiving, at the merchant device from the customer device, a connection request to initiate a connection between the merchant device and the customer device, iii) exchanging encryption keys between the merchant device and the customer device to establish a secure wireless channel, iv) receiving, over the secure wireless channel, at the merchant device, a check-in request from the customer device, v) prompting the merchant to accept the check-in request by displaying a message on the merchant device, vi) accepting, at the merchant device, the check-in request based on an input made by the merchant on the merchant device, vii) generating, as a result of acceptance of the check-in request, cart information of the customer at the merchant device, viii) transmitting, by the merchant device, the cart information to the customer device to cause the cart information to be displayed on the customer device, ix) determining, via the secure wireless channel, at least one payment option, and x) processing, over the secure wireless channel established between the merchant device and the customer device, a payment based on a selected payment option). Accordingly, for at least the reasons set forth above, the present claims do not recite a mental process. Further, the present claims do not recite a particular mathematical relationship or formula, and thus do not recite a mathematical concept.

Regarding methods of organizing human activity, while the claims generally relate to payment transactions, the claim limitations themselves are narrowly focused on a particular sequence of actions performed between a merchant device (i.e., a POS terminal) and a customer device at a retail location to establish a secure wireless channel between the devices, synchronize cart information between the devices, and process payment over the secure wireless channel. These actions are technical limitations that involve specific data manipulations (broadcasting info, exchanging encryption keys, prompts, processing payment, etc.). Performing data

manipulations at this level of specificity is not reasonably construed as a mere method of organizing human activity.

Therefore, these claims should be found to be subject matter eligible under the First Prong.

Even assuming, *arguendo*, that the present claims recite an abstract idea, the present claims are subject-matter eligible under the Second Prong of Step 2A. Under the Second Prong, a claim that recites an abstract idea nevertheless is not “directed to” the abstract idea if the claim as a whole integrates the abstract idea into a practical application. *See* 2019 PEG. Notably, under the Second Prong, it is immaterial whether the claim recites “conventional” computer elements or functions. In other words, recitation of computer elements and functions that represent well-understood, routine, or conventional activity may still integrate an exception into a practical application.

As noted above, the present claims, viewed at the highest level of generality, relate to payment transactions. However, the specific limitations of the claims are directed to a practical application. That is, the detailed limitations recite a specific manner of establishing a secure wireless channel between the devices, synchronizing cart information between the devices, and processing payment over the secure wireless channel.

In the Office Action, in reference to the Second Prong of Step 2A the Office asserts that the present claims recite a generic computing device and generic computer elements. Accordingly, the Office appears to be arguing that the present claims are not directed to improvements to the functioning of a computer. However, under the Second Prong, limitations that are indicative of integration into a practical application include “[i]mprovements to the functioning of a computer, or to *any other technology or technical field*.” (Citing MPEP 2106.05(a), emphasis added).

Here, the claims recite a *specific improvement in the field of conducting electronic payment transactions between a cardholder device and a merchant POS device* in accordance with the 2019 PEG. Applicant’s disclosure at, for example, paragraphs [0004]-[0006] describes the difficulties with existing check-out processes at a physical merchant location for customers

who wish to efficiently check-out without waiting in line, and who wish to verify/modify line item purchases during the check-out process prior to tendering payment. The present claims, when viewed as a whole, describe a specific method that improves upon these deficiencies, and provides technical improvements. For example, the claimed systems and methods improve transaction speed and efficiency, and solve problems associated with known systems (e.g., customers unable to check purchases in real-time before checking out, customers waiting in line to check out, customers waiting at a table to check out at a restaurant, etc.).

Accordingly, the Specification of the present application describes the technical problem, while the Specification and the present claims recite a technical solution to the technical problem. As described in the Specification and recited in the claims, a customer device and a merchant device at a retail location establish a secure wireless channel between the devices, synchronize cart information between the devices, and process payment over the secure wireless channel. *See Ex parte Del Bene*, No. 2017-009185 (PTAB Feb. 28, 2019) (reversing Section 101 rejection under the second prong due to improvement of the underlying consumer behavior technology). Thus, the claims provide an improvement to the technical field of electronic payment transactions between a cardholder device and a merchant POS device.

Accordingly, Applicant submits that the present independent claims provide specific improvements over prior systems and are directed to a practical application, such that the present claims are not directed to an abstract idea under the Second Prong of Step 2A.

In the alternative, even assuming that the claims are directed towards the alleged “abstract idea” under Step 2A, the independent claims recite “significantly more” than the abstract idea itself under Step 2B.

For example, the improvements described by the present claims are analogous to those in *DDR Holdings, LLC v. Hotels.com et al.*, 113 USPQ2d 1097 (Fed. Cir. 2014). In *DDR Holdings*, the court held that the claims in the case stood apart because they did not “merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” *Id.*

Just as in *DDR Holdings*, the claims of the present application present a “claimed solution . . . necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” More specifically, the systems and methods recited in the present claims specifically address the problem of customers typically having no opportunity to verify their purchase line items, including vouchers and discounts, in real-time prior to making a payment and receiving a receipt (Specification, [0004]-[0006]). The present claims address this problem by enabling a secure wireless channel to be established between a customer device and a merchant device while both devices are located at a physical merchant location, such that a customer can review, in real-time, items for purchase on their customer device during the check-out process. Accordingly, the present claims are rooted in computer technology, and directed to patent eligible subject matter for at least the same reasons given in *DDR Holdings*.

For at least the reasons described above, the independent claims recite elements that are significantly more than the alleged abstract idea under Step 2B.

Further, in the event that the Office maintains that the independent claims do not satisfy §101, Applicant submits that at least dependent Claim 11 is directed to patent-eligible subject matter.

Dependent Claim 11 recites that the method further includes “receiving, from the customer device at the merchant device, a cart lock request generated at the customer device, the cart lock request allowing the customer device to control operation of the merchant device . . . locking, by the merchant device, the cart information in response to the cart lock request received from the customer device, wherein locking the cart information allows the customer device to prevent the merchant from editing the cart information on the merchant device . . . receiving, from the customer device at the merchant device, a cart update, wherein the cart update indicates an addition or removal of an item from the cart information . . . sending, from the merchant device to the customer device, a cart update acknowledgement . . . receiving, from the customer device at the merchant device, a cart unlock request generated at the customer device, the cart unlock request allowing the customer device to further control operation of the merchant device . . . and unlocking, by the merchant device, the cart information in response to

the cart unlock request received from the customer device, allowing the customer device to permit the merchant to resume editing the cart information on the merchant device.” Accordingly, Claim 11 is generally directed to *the customer device transmitting messages (e.g., the cart lock request and the cart unlock request) to the merchant device to control operation of the merchant device.*

Under the First Prong of Step 2A, Applicant submits that none of the recitations of dependent Claim 11 can be performed mentally, recite nothing more than mathematical concepts, or are reasonably categorized as methods of organizing human activity. Accordingly Claim 11 is not directed to an abstract idea.

Even assuming, *arguendo*, that Claim 11 recites an abstract idea, Claim 11 is subject-matter eligible under the Second Prong of Step 2A because Claim 11 integrates any alleged abstract idea into a practical application. Specifically, Claim 11 is directed to a customer device controlling operation of a merchant device to provide technical improvements (i.e., by allowing the customer device to selectively inhibit modification of cart information on the merchant device).

Accordingly, Applicant submits that the Claim 11 provides specific improvements over prior systems and is directed to a practical application, such that the Claim 11 is not directed to an abstract idea under the Second Prong of Step 2A.

Further, even assuming that Claim 11 is directed towards any alleged “abstract idea” under Step 2A, Claim 11 recites “significantly more” than the abstract idea itself under Step 2B.

As explained in MPEP 2106.05(I)(A)(v), adding a specific limitation other than what is well-understood, routine, conventional activity in the field, or adding unconventional steps that confine the claim to a particular useful application, *e.g.*, a non-conventional and non-generic arrangement of various computer components for filtering Internet content, as discussed in *BASCOM Global Internet v. AT&T Mobility LLC*, 827 F.3d 1341, 1350-51, 119 USPQ2d 1236, 1243 (Fed. Cir. 2016) (see MPEP § 2106.05(d)), qualifies a claim as “significantly more.” Similarly to *BASCOM*, Claim 11 is directed to a non-conventional and non-generic arrangement of computer components, as it is directed to *a customer device transmitting messages (e.g., a*

cart lock request and a cart unlock request) to a merchant device to control operation of the merchant device. Accordingly, like the claims at issue in *BASCOM*, Claim 11 is directed to “significantly more” than any alleged abstract idea.

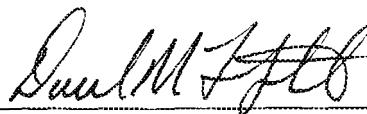
For at least the above reasons, at least dependent Claim 11 is directed to patent-eligible subject matter.

Accordingly, for at least the reasons described above, Claims 1, 2, 5, 6, 9-19, 21, and 22 are submitted to be eligible under §101. Applicant respectfully requests the §101 rejection be withdrawn.

Concluding Remarks

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action are respectfully solicited.

Respectfully submitted,



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