



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/788,081	06/30/2015	Jiaming Li	21652-00549	7300
75564	7590	03/18/2019	EXAMINER	
DANIEL M. FITZGERALD (21652)			KHATTAR, RAJESH	
ARMSTRONG TEASDALE LLP			ART UNIT	
7700 Forsyth Boulevard			PAPER NUMBER	
Suite 1800			3693	
St. Louis, MO 63105			NOTIFICATION DATE	
			DELIVERY MODE	
			03/18/2019	
			ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USpatents@armstrongteasdale.com

Office Action Summary

Application No. 14/788,081	Applicant(s) Li et al.	
Examiner RAJESH KHATTAR	Art Unit 3693	AIA (FITF) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11/20/2018.
 A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
- 4) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

- 5) Claim(s) 1-2,5-6,9-19 and 21-22 is/are pending in the application.
5a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 6) Claim(s) _____ is/are allowed.
- 7) Claim(s) 1-2,5-6,9-19 and 21-22 is/are rejected.
- 8) Claim(s) _____ is/are objected to.
- 9) Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) The specification is objected to by the Examiner.
- 11) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) All b) Some** c) None of the:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
Paper No(s)/Mail Date _____.
- 3) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 4) Other: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Applicant filed a response dated 11/20/2018 in which claims 1, 17-19, and 21 have been amended, claims 3-4, 7-8, and 20 have been canceled and new claim 22 has been added. Thus, the claims 1-2, 5-6, 9-19, and 21-22 are pending in the application.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/20/2018 has been entered.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-2, 5-6, 9-19, and 21-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to an abstract idea without significantly more.

Examiner has identified claim 1 as the claim that represents the claimed invention presented in independent claims 1 and 17-18.

Claim 1 is directed to a method which is one of the statutory categories of invention (*Step 1: YES*).

The claim 1 recites the abstract idea of conducting a transaction and is illustrated by a series of steps. The claim 1 recites the limitations of broadcasting information identifying the merchant while the merchant and customer are both located at a physical merchant location to cause the broadcast information to be displayed; receiving a connection request to initiate a connection between the merchant and the customer; in response to the received connection request, exchanging encryption keys between the merchant and the customer to establish a secure wireless channel between the merchant and the customer; receiving, over the secure wireless channel, at the merchant, a check-in request from the customer, the check-in request including information identifying the customer; prompting the merchant to accept the check-in request by displaying a message; accepting at the merchant, the check-in request based on an input made by the merchant 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, the cart information generated based on data inputted by the merchant, the cart information representing details of items being purchased; transmitting, by the merchant, the cart information to the customer to cause the cart information to be displayed prior to initiating a payment process for the items and while the customer is located at the physical merchant location, and to cause the cart information to be synchronized in real-time between the merchant and the customer 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, a payment associated with the cart information based on a selected payment option out of the at least one payment option. These limitations may correspond to Certain Methods of Organizing Human Activity (commercial or legal interactions). The device limitations do not necessarily restrict the claim from reciting an abstract idea (*Step 2A: YES*). Thus, the claim 1 is directed to an abstract idea.

This judicial exception is not integrated into a practical application because the additional limitations of merchant device, customer device, and a POS result in no more than simply applying the

abstract idea using generic computer elements. The additional elements of a computing device is recited at a high level of generality and under their broadest reasonable interpretation comprises a generic computing device. The presence of a generic computing device does nothing more than to implement the claimed invention (MPEP 2106.05(g)). The limitations such as exchanging encryption keys in order to establish a secure wireless channel is simply a field of use limitations (MPEP 2106.05(h)). Therefore, the recitations of additional elements do not meaningfully apply the abstract idea and hence do not integrate the abstract idea into a practical application. Thus, the claim 1 is directed to an abstract idea (*Step 2A-Prong 2: NO*).

The claim 1 does not include additional elements that are sufficient to amount to significantly more than the judicial exception because the additional elements of a computing device is recited at a high level of generality in that it results in no more than simply applying the abstract idea using generic computer elements. The limitations such as exchanging encryption keys in order to establish a secure wireless channel is simply a field of use limitations (MPEP 2106.05(h)). The additional elements when considered separately and as an ordered combination do not amount to add significantly more as these limitations provide nothing more than simply applying the exception in a generic computer environment (*Step 2B: NO*). Thus, the claim 1 is not patent eligible.

Similar arguments can be extended to other independent claims 17-18 and hence the claims 17-18 are rejected on similar grounds as claim 1.

Dependent claims 2, 5-6, 9-16, 19, and 21-22 further define the abstract idea that is present in their respective independent claims 1 and 18 and thus correspond to Certain Methods of Organizing Human Activity and hence are abstract in nature for the reasons presented above. Dependent claims do not include any additional elements that integrate the abstract idea into a practical application or are sufficient to amount to significantly more than the judicial exception when considered both individually

and as an ordered combination. Therefore, the claims 2, 5-6, 9-16, 19, and 21-22 are directed to an abstract idea. Thus, the claims 1-2, 5-6, 9-19, and 21-22 are not patent-eligible.

Response to Arguments

Applicant's arguments filed dated 11/20/2018 have been fully considered but they are not persuasive due to the following reasons:

With respect to the rejection of claims 1-2, 5, 6, 9-19, 21, and 22 under 35 U.S.C. 101, Applicant states that the claims recite an unconventional computing architecture-namely, an unconventional and non-generic method of establishing secure communications between a merchant device and a customer device that are both located at a physical merchant location. This unconventional method provides technical improvements, including (i) enabling a customer to review items in real-time during a check-out process, thereby reducing subsequent network activity and (ii) leveraging a secure communication channel previously-established between the customer device and the merchant device to process the customer's payment rather than having to reestablish a secure connection for the payment. Applicant also cites various cases, e.g. *McRO* to support that the claimed invention improves the relevant technology.

Examiner respectfully disagrees and notes that the claim simply makes use of technology that provides secure communication between the merchant device and the customer device. For example, the claim simply makes use of existing encryption techniques in establishing a secure communication channel between the merchant device and the customer device. There is no computer functionality or technology/technical improvement as a result of the claimed process. In other words, the claim simply applies the abstract idea of conducting a transaction by using secure communication channel as a tool to securely conduct a transaction between the merchant device and a customer device. This does not amount to integrating the abstract idea into a practical application under *Step 2A-Prong 2* or provide significantly more under *Step 2B*. Thus, these arguments are not persuasive.

With respect to Applicant's arguments regarding *buySAFE*, *Inventor Holdings* and *Enfish* regarding "oversimplification" or "untethered from the language of the claims, Examiner notes that these arguments are moot in view of the 35 U.S.C. 101 rejection presented above based on new guidance (2019 PEG).

With respect to Applicant's arguments regarding "Significantly More" Than the Abstract Idea (*Berkheimer*), Examiner notes that these arguments are moot in view of 35 U.S.C. 101 rejection presented above based on new guidance (2019 PEG).

With respect to Applicant's arguments regarding *DDR Holdings*, Examiner notes that unlike *DDR Holdings*, the claimed invention simply uses the technology as a tool in applying the abstract idea without providing any technical improvements. Simply using a technology does not restrict the claim to be rooted in computer technology particularly when the claimed abstract idea simply corresponds to Certain Methods of Organizing Human Activity. Thus, these arguments are not persuasive.

With respect to Applicant's arguments regarding *BASCOM*, *Enfish* and Example 35, Examiner notes that unlike *BASCOM*, *Enfish* and Example 35, the claimed invention does not provide any improvements that may integrate the abstract idea into a practical application and hence the claimed invention do not meaningfully apply the abstract idea in a way that may result in patent eligibility. Providing secure communications between and communicate cart information between a merchant device and a customer device during a transaction at a physical merchant location is viewed as applying the claimed invention using technology. The claimed process does not result in technology improvement. It simply makes use of the encryption technology to create secure communication. Thus, these arguments are not persuasive.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAJESH KHATTAR whose telephone number is (571)272-7981. The examiner can normally be reached on M-F 8AM-5PM.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shahid Merchant can be reached on 571-270-1360. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RAJESH KHATTAR/
Primary Examiner, Art Unit 3693