PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 70481-99WO01	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2016/048777	International filing date *(day/month/year)* 25 August 2016 (25.08.2016)	Priority date *(day/month/year)* 25 August 2015 (25.08.2015)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant PAYPAL, INC.		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☒	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 27 February 2018 (27.02.2018)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Athina Nickitas-Etienne e-mail: pct.team4@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Tom Chen
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United States of America

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)* 27 OCT 2016

Applicant's or agent's file reference	FOR FURTHER ACTION
70481-99WO01	See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US16/48777	25 August 2016 (25.08.2016)	25 August 2015 (25.08.2015)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - G06Q20/36, G06Q20/40, G06Q30/02 (2016.01)
CPC - G06Q20/367, G06Q20/3674, G06Q20/40

Applicant PAYPAL, INC.

1. This opinion contains indications relating to the following items:

- [x] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [x] Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [x] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Fom PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-8300	12 October 2016 (12.10.2016)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

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Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a)).

3. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing:

   a. ☐ forming part of the international application as filed:

      ☐ in the form of an Annex C/ST.25 text file.

      ☐ on paper or in the form of an image file.

   b. ☐ furnished together with the international application under PCT Rule 13*ter*.1(a) for the purposes of international search only in the form of an Annex C/ST.25 text file.

   c. ☐ furnished subsequent to the international filing date for the purposes of international search only:

      ☐ in the form of an Annex C/ST.25 text file (Rule 13*ter*.1(a)).

      ☐ on paper or in the form of an image file (Rule 13*ter*.1(b) and Administrative Instructions, Section 713).

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that forming part of the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

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Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	4-9, 13-18	YES
	Claims	1-3, 10-12, 19, 20	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	NONE	NO

2. Citations and explanations:

Claims 1-3, 10-12, 19 and 20 lack novelty under PCT Article 33(2) as being anticipated by US 2014/0039990 A1 to GEORGI, R (hereinafter "Georgi").

As per claims 1, 10 and 19, Georgi discloses a verification system, a method of verifying a transaction (validate or authorize a payment or transaction; paragraph [0077]), and a non-transitory machine-readable medium (non-transitory machine-readable medium; paragraph [0078]), the system, method and medium comprising: a non-transitory memory (main memory 204 and a static memory 206; figure 2; paragraph [0084]) storing a common identifier that identifies a user (a consumer 108 engages in a transaction and presents a CID 122 (common identifier) as a first consumer identifier, which is read or detected by a resource provider 110 apparatus (includes medium and memory); figures 1, 3; paragraphs [0061], [0087]); and one or more hardware processors coupled to the memory and configured to read instructions from the memory (the storage unit 216 includes a machine-readable medium 222 on which is stored instructions 224 for execution by processor 202; figure 2; paragraph [0085]) to perform the steps of: receiving a token associated with a request to complete a transaction with an environment (a CID 122 includes a digital string associated with a consumer 108, which includes a token, which can be presented at each transaction in a rewards program; paragraph [0075]); determining the common identifier associated with the token (a token is a part of a digital string associated with a CID 122 associated with a consumer 108; paragraph [0075]), the common identifier being associated with an identifier of a merchant (when a CID 122 is presented, a UID 120 is generated and associated with the transaction (associated with a merchant 110); paragraphs [0090], [0106]), an identifier of the user requesting the transaction (the CID 122 consists of a plurality of consumer identification types (user identifiers) such as a phone number; paragraph [0075]), and a funding instrument associated with the user (the CID 122 consists of an account number tied to a payment card; paragraph [0075]); and determining, based on information associated with the common identifier, whether to approve the transaction (approving the transaction based on the CID 122; figure 5A; paragraphs [0090], [0108]-[0117]).

As per claims 2, 11 and 20, Georgi discloses the system of claim 1, the method of claim 10 and the non-transitory machine-readable medium of claim 19, respectively, wherein the common identifier is based on one or more postings on the user's social media profile (the CID 122 includes a social network address, a graphic image, a photograph, and any other useful source of identification (images and photos can be postings associated with a social media profile); paragraph [0075]).

As per claims 3 and 12, Georgi discloses the system of claim 1 and the method of claim 10, respectively, wherein the common identifier uniquely identifies the user with respect to a social media platform (the CID 122 includes a social network address; paragraph [0075]).

Claims 4-7 and 13-16 lack an inventive step under PCT Article 33(3) as being obvious over Georgi in view of US 2014/0344149 A1 to BLACKHAWK NETWORK, INC. (hereinafter "Blackhawk").

As per claims 4 and 13, Georgi discloses the system of claim 1 and the method of claim 10, respectively, but does not disclose wherein the token is an open loop token that is routable back to a token service provider that issued the token. Blackhawk discloses wherein the token is an open loop token that is routable back to a token service provider that issued the token (a value token can be associated with an open loop account, which is typically an ongoing obligation for various entities to credit and debit the account (routable back to the service provider); paragraph [0074]). It would have been obvious to a person of ordinary skill in the art, at the time of the invention, to modify the Georgi invention to provide wherein the token is an open loop token that is routable back to a token service provider that issued the token, as taught by Blackhawk, in order to provide the benefit of an account that has no expiration date (Blackhawk, paragraph [0074]).

As per claims 5 and 14, Georgi discloses the system of claim 1 and the method of claim 10, respectively, but does not disclose wherein the token is a closed loop token that is recognizable only by a token service provider that issued the token. Blackhawk discloses wherein the token is a closed loop token that is recognizable only by a token service provider that issued the token (a value token can be associated with a closed loop account, which is often associated directly with retailers who are able to debit or credit closed loop accounts associated with the closed loop account number; paragraph [0074]). It would have been obvious to a person of ordinary skill in the art, at the time of the invention, to modify the Georgi invention to provide wherein the token is a closed loop token that is recognizable only by a token service provider that issued the token, as taught by Blackhawk, in order to provide payment instruments that have an expiration date, so as to prevent charges to an account in the event the payment card is lost or stolen.

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE
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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Claims 11-15, 17 and 18 are objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof: each of these claims as written depend on the method of claim 1. However, claim 1 is a system claim. For the purposes of this examination, it is assumed that the applicant intended claims 11-15, 17 and 18 to depend on the method of claim 10.

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Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Box V: Citations and Explanations-***-

As per claims 6 and 15, Georgi discloses the system of claim 1 and the method of claim 10, respectively, but does not disclose wherein a scope of the token is based on knowledge about the user's preferences. Blackhawk discloses wherein a scope of the token is based on knowledge about the user's preferences (specific details associated with the electronic value tokens can be ranked in regards to preference for use; paragraph [0152]). It would have been obvious to a person of ordinary skill in the art, at the time of the invention, to modify the Georgi invention to provide wherein a scope of the token is based on knowledge about the user's preferences, as taught by Blackhawk, in order to provide more targeted tokens that are more closely aligned with a user's spending preferences.

As per claims 7 and 16, Georgi and Blackhawk, in combination, disclose the system of claim 6, and the method of claim 15, respectively, but Georgi does not disclose wherein the knowledge about the user's preferences is based on the user's social media profile. Blackhawk discloses wherein the knowledge about the user's preferences is based on the user's social media profile (the user's electronic wallet is integrated with the user's social network services (profiles); a user receives value tokens via social network platforms, and agrees to certain terms and conditions; paragraphs [0149]-[0152]). It would have been obvious to a person of ordinary skill in the art, at the time of the invention, to modify the Georgi invention to provide wherein the knowledge about the user's preferences is based on the user's social media profile, as taught by Blackhawk, in order to provide integration of the transaction system with social media profiles and networks.

Claims 8 and 17 lack an inventive step under PCT Article 33(3) as being obvious over Georgi in view of US 2015/0186871 A1 to LARACEY, K (hereinafter "Laracey").

As per claims 8 and 17, Georgi discloses the system of claim 1 and the method of claim 10, respectively, but does not disclose wherein a scope of the token is based on knowledge about the merchant's preferences. Laracey discloses wherein a scope of the token is based on knowledge about the merchant's preferences (a checkout token is passed to an NFC reader during a transaction; payment accounts available for a customer's use in the transaction are displayed in order based on one or more rules established by the merchant or based on the identity of the merchant 208; paragraphs [0093], [0097]). It would have been obvious to a person of ordinary skill in the art, at the time of the invention, to modify the Georgi invention to provide wherein a scope of the token is based on knowledge about the merchant's preferences, as taught by Laracey, in order to provide a means to gain access to rules regarding interchange, so as to present payment accounts in a sequence so that the merchant pays the smallest interchange fee (Laracey, paragraph [0097]).

Claims 9 and 18 lack an inventive step under PCT Article 33(3) as being obvious over Georgi in view of WO 2014/117095 A1 to JUST PUSH PAY, LLC (hereinafter "JPP").

As per claims 9 and 18, Georgi discloses the system of claim 1 and the method of claim 10, respectively, but does not disclose wherein a scope of the token is based on knowledge about a token service provider's preferences, wherein the token service provider issued the token. JPP discloses wherein a scope of the token is based on knowledge about a token service provider's preferences, wherein the token service provider issued the token (the service provider stores tokens, and then the service provider sends email to preferred business indicating that they can use the system and receive payments; paragraphs [0088], [0089]). It would have been obvious to a person of ordinary skill in the art, at the time of the invention, to modify the Georgi invention to provide wherein a scope of the token is based on knowledge about a token service provider's preferences, wherein the token service provider issued the token, as taught by JPP, in order to provide token service providers with the ability to designate businesses to receive payments.

Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.