PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4799592

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
THOMAS TEMPLETON	01/29/2016
ALEXEY KALINICHENKO	09/06/2017
ANDREW BOROVSKY	11/16/2016
PAUL AARON	11/15/2016
JESSE L. DOROGUSKER	11/11/2014

RECEIVING PARTY DATA

Name:	SQUARE, INC.
Street Address:	1455 MARKET STREET, SUITE 600
City:	SAN FRANCISCO
State/Country:	CALIFORNIA
Postal Code:	94103

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14455287

CORRESPONDENCE DATA

Fax Number: (267)546-0594

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 2675460624

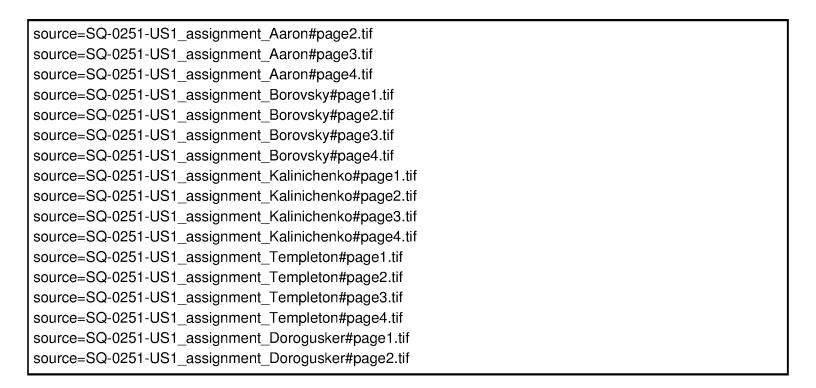
Email: patents@sprucelaw.com
Correspondent Name: STEPHEN B. SCHOTT
Address Line 1: 1622 SPRUCE STREET

Address Line 4: PHILADELPHIA, PENNSYLVANIA 19103

ATTORNEY DOCKET NUMBER:	SQ-0251-US1
NAME OF SUBMITTER:	STEPHEN B. SCHOTT
SIGNATURE:	/Stephen B. Schott/
DATE SIGNED:	01/30/2018

Total Attachments: 18

source=SQ-0251-US1_assignment_Aaron#page1.tif



ASSIGNMENT

WHEREAS, I/We, the undersigned, have invented certain new and useful inventions and improvements disclosed in an application for patent entitled:

CONTROLLED EMULATION OF PAYMENT CARDS

(such inventions and improvements hereinafter referred to collectively as the "<u>Inventions</u>"), which application was filed in the United States Patent and Trademark Office on **August 8, 2014**, and accorded U.S. Patent Application No. **14/455,287** (the "<u>Application(s)</u>");

AND, WHEREAS, Square, Inc., a corporation of the state of Delaware, having a place of business at 1455 Market St., Suite 600, San Francisco, CA, 94103, on behalf of itself and its successors and assigns (the "Assignee"), is entitled to, and is desirous of acquiring the entire and exclusive rights, title and interest in and to the Inventions and the Application(s) in the United States and throughout the world.

NOW, THEREFORE, for and in consideration of good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I/We, the undersigned, do hereby sell, assign, transfer and convey to the Assignee the entire and exclusive rights, title and interest, including the right of priority, in and to: (a) the Inventions in the United States and throughout the world, and (b) any Letters Patent or similar legal rights, including extensions thereof, in the United States and its territorial possessions and in any foreign countries to be obtained for the Inventions by the above-described Application or any provisional, non-provisional, continuation, division, substitute, renewal, reissue, reexamination or other application for patent related thereto, or by any equivalents thereof in any foreign countries.

ALSO, I/We, the undersigned, further assign to and empower the Assignee, its successors, assigns and legal representatives all rights to make application for patent or other forms of protection for the Inventions in the United States and its territorial possessions and in any foreign countries and to prosecute such applications, together with the right to claim and receive the benefit of any priority rights provided under any applicable laws, conventions, treaties, statutes or regulations and the right to claim such priority rights without further written or oral authorization.

ALSO, I/We, the undersigned, hereby authorize and request the Commissioner for Patents of the United States and any official of any country or countries foreign to the United States whose duty it is to issue Letters Patent or similar legal rights on applications aforesaid, to issue all such Letters Patent or similar rights for the Inventions to the Assignee, as assignee of the entire right, title and interest in and to the same, for the Assignee's own use and benefit, and for the use and benefit of the Assignee's successors, assigns and legal representatives, to the full end of the term for which such Letters Patent or similar rights may be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned had this assignment not been made.

ALSO, I/We, the undersigned, hereby covenant and agree to execute and deliver to Assignee, its successors, assigns and/or legal representatives all instruments and documents that legally may be required, necessary or desirable in connection with the filing, prosecution, litigation, maintenance, enforcement and defense of the above-described Application or any other application for patent which has been or shall be filed in the United States and its territorial possessions and/or in any foreign countries for the Inventions, including any additional documents or instruments of transfer to affirm the rights of Assignee, its successors, assigns and/or legal representatives in and to said Inventions, all without further consideration. I/We, the undersigned, also agree, without requesting or receiving additional consideration from Assignee, but at Assignee's expense, to identify and communicate to Assignee, its successors, assigns and/or legal representatives all facts known to the undersigned relating to the Inventions and the history thereof, and to provide further assurances and testimony on behalf of Assignee, its successors, assigns and/or legal representatives that lawfully may be required, necessary or desirable in respect of the filing, prosecution, litigation, maintenance, enforcement and defense of any patent application or Letters Patent encompassed within the terms of this assignment. The undersigned's obligations under this assignment shall extend to the undersigned's heirs, executors, administrators and legal representatives.

ALSO, I/We, the undersigned, covenant and agree that no assignment, grant, mortgage, license or other agreement encumbering the rights and property herein conveyed has been made to others by the undersigned, and that the full right to convey the same as expressed herein is possessed by the undersigned.

ALSO, I/We, the undersigned, hereby grant Assignee's legal representatives, of **Perkins Coie LLP**, the power to insert on this assignment any further identification which may be necessary or desirable for recordation of this assignment, including inserting the application serial number and filing date when known.

IN WITNESS WHEREOF, the undersigned has/have executed this assignment as of the date(s) indicated below.

Inventor's Signature:		
		Date:
Typed Name:	Thomas Templeton	
Witnessed by:		
Witness' Signature:		Date:
Witness' Name		

Inventor's Signature:		Date:
Typed Name:	Alexey Kalinichenko	
Witnessed by:		
Witness' Signature:		Date:
Witness' Name:		
Inventor's Signature:		Date:
Typed Name:	Andrew Borovsky	
Witnessed by:		
Witness' Signature:		Date:
Witness' Name:		

Inventor's Signature:	DocuSigned by:	Date:
Typed Name:	Paul Aaron	
Witnessed by:		
Witness' Signature:		Date:
Witness' Name:		
Inventor's Signature:		Date:
Typed Name:	Jesse L. Dorogusker	
Witnessed by:		
Witness' Signature:		Date:
Witness' Name:		

ASSIGNMENT

WHEREAS, I/We, the undersigned, have invented certain new and useful inventions and improvements disclosed in an application for patent entitled:

CONTROLLED EMULATION OF PAYMENT CARDS

(such inventions and improvements hereinafter referred to collectively as the "<u>Inventions</u>"), which application was filed in the United States Patent and Trademark Office on **August 8, 2014**, and accorded U.S. Patent Application No. **14/455,287** (the "<u>Application(s)</u>");

AND, WHEREAS, Square, Inc., a corporation of the state of Delaware, having a place of business at 1455 Market St., Suite 600, San Francisco, CA, 94103, on behalf of itself and its successors and assigns (the "Assignee"), is entitled to, and is desirous of acquiring the entire and exclusive rights, title and interest in and to the Inventions and the Application(s) in the United States and throughout the world.

NOW, THEREFORE, for and in consideration of good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I/We, the undersigned, do hereby sell, assign, transfer and convey to the Assignee the entire and exclusive rights, title and interest, including the right of priority, in and to: (a) the Inventions in the United States and throughout the world, and (b) any Letters Patent or similar legal rights, including extensions thereof, in the United States and its territorial possessions and in any foreign countries to be obtained for the Inventions by the above-described Application or any provisional, non-provisional, continuation, division, substitute, renewal, reissue, reexamination or other application for patent related thereto, or by any equivalents thereof in any foreign countries.

ALSO, I/We, the undersigned, further assign to and empower the Assignee, its successors, assigns and legal representatives all rights to make application for patent or other forms of protection for the Inventions in the United States and its territorial possessions and in any foreign countries and to prosecute such applications, together with the right to claim and receive the benefit of any priority rights provided under any applicable laws, conventions, treaties, statutes or regulations and the right to claim such priority rights without further written or oral authorization.

ALSO, I/We, the undersigned, hereby authorize and request the Commissioner for Patents of the United States and any official of any country or countries foreign to the United States whose duty it is to issue Letters Patent or similar legal rights on applications aforesaid, to issue all such Letters Patent or similar rights for the Inventions to the Assignee, as assignee of the entire right, title and interest in and to the same, for the Assignee's own use and benefit, and for the use and benefit of the Assignee's successors, assigns and legal representatives, to the full end of the term for which such Letters Patent or similar rights may be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned had this assignment not been made.

ALSO, I/We, the undersigned, hereby covenant and agree to execute and deliver to Assignee, its successors, assigns and/or legal representatives all instruments and documents that legally may be required, necessary or desirable in connection with the filing, prosecution, litigation, maintenance, enforcement and defense of the above-described Application or any other application for patent which has been or shall be filed in the United States and its territorial possessions and/or in any foreign countries for the Inventions, including any additional documents or instruments of transfer to affirm the rights of Assignee, its successors, assigns and/or legal representatives in and to said Inventions, all without further consideration. I/We, the undersigned, also agree, without requesting or receiving additional consideration from Assignee, but at Assignee's expense, to identify and communicate to Assignee, its successors, assigns and/or legal representatives all facts known to the undersigned relating to the Inventions and the history thereof, and to provide further assurances and testimony on behalf of Assignee, its successors, assigns and/or legal representatives that lawfully may be required, necessary or desirable in respect of the filing, prosecution, litigation, maintenance, enforcement and defense of any patent application or Letters Patent encompassed within the terms of this assignment. The undersigned's obligations under this assignment shall extend to the undersigned's heirs, executors, administrators and legal representatives.

ALSO, I/We, the undersigned, covenant and agree that no assignment, grant, mortgage, license or other agreement encumbering the rights and property herein conveyed has been made to others by the undersigned, and that the full right to convey the same as expressed herein is possessed by the undersigned.

ALSO, I/We, the undersigned, hereby grant Assignee's legal representatives, of Perkins Coie LLP, the power to insert on this assignment any further identification which may be necessary or desirable for recordation of this assignment, including inserting the application serial number and filing date when known.

IN WITNESS WHEREOF, the undersigned has/have executed this assignment as of the date(s) indicated below.

Inventor's Signature:		
		Date:
Typed Name:	Thomas Templeton	
Witnessed by:		
Witness' Signature:		Date:
Witness' Name		

78494-8078.US01/128260676.1 **PATENT** REEL: 044762 FRAME: 0807

Inventor's Signature:		Date:
Typed Name:	Alexey Kalinichenko	
Witnessed by:		
Witness' Signature:		Date:
Witness' Name:		
Inventor's Signature: Typed Name:	Docusigned by: INDICAN BOYOWSKY F49BF5CF52054E6 Andrew Borovsky	Date: <u>11/16/2016</u>
Witnessed by: Witness' Signature:		Date:
Witness' Name:		

Inventor's Signature:		Date:
Typed Name:	Paul Aaron	
Witnessed by:		
Witness' Signature:		Date:
Witness' Name:		
Inventor's Signature:		Date:
Typed Name:	Jesse L. Dorogusker	
Witnessed by:		
Witness' Signature:		Date:
Witness' Name:		

ASSIGNMENT

WHEREAS, I/We, the undersigned, have invented certain new and useful inventions and improvements disclosed in an application for patent entitled:

CONTROLLED EMULATION OF PAYMENT CARDS

(such inventions and improvements hereinafter referred to collectively as the "<u>Inventions</u>"), which application was filed in the United States Patent and Trademark Office on **August 8, 2014**, and accorded U.S. Patent Application No. **14/455,287** (the "<u>Application(s)</u>");

AND, WHEREAS, Square, Inc., a corporation of the state of Delaware, having a place of business at 1455 Market St., Suite 600, San Francisco, CA, 94103, on behalf of itself and its successors and assigns (the "Assignee"), is entitled to, and is desirous of acquiring the entire and exclusive rights, title and interest in and to the Inventions and the Application(s) in the United States and throughout the world.

NOW, THEREFORE, for and in consideration of good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I/We, the undersigned, do hereby sell, assign, transfer and convey to the Assignee the entire and exclusive rights, title and interest, including the right of priority, in and to: (a) the Inventions in the United States and throughout the world, and (b) any Letters Patent or similar legal rights, including extensions thereof, in the United States and its territorial possessions and in any foreign countries to be obtained for the Inventions by the above-described Application or any provisional, non-provisional, continuation, division, substitute, renewal, reissue, reexamination or other application for patent related thereto, or by any equivalents thereof in any foreign countries.

ALSO, I/We, the undersigned, further assign to and empower the Assignee, its successors, assigns and legal representatives all rights to make application for patent or other forms of protection for the Inventions in the United States and its territorial possessions and in any foreign countries and to prosecute such applications, together with the right to claim and receive the benefit of any priority rights provided under any applicable laws, conventions, treaties, statutes or regulations and the right to claim such priority rights without further written or oral authorization.

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ALSO, I/We, the undersigned, hereby grant Assignee's legal representatives, of **Maynard, Cooper & Gale, LLP**, the power to insert on this assignment any further identification which may be necessary or desirable for recordation of this assignment, including inserting the application serial number and filing date when known.

IN WITNESS WHEREOF, the undersigned has/have executed this assignment as of the date(s) indicated below.

Inventor's Signature:			
		Date:	
Typed Name:	Thomas Templeton		
Witnessed by:			
Witness' Signature:		Date:	
Witness' Name			

P.

DOCKET NO.: SQ-0251-US1

Inventor's Signature:	alexey talinidunko	Date: 9/6/2017
Typed Name:	Alexey Kalinichenko	
Witnessed by:		
Witness' Signature:		Date:
Witness' Name:		
Inventor's Signature:		Date:
Typed Name:	Andrew Borovsky	
Witnessed by:		
Witness' Signature:		Date:
Witness' Name:		

DOCKET NO.: SQ-0251-US1

Inventor's Signature:		Date:
Typed Name:	Paul Aaron	
Witnessed by:		
Witness' Signature:	-	Date:
Witness' Name:		
Inventor's Signature:		Date:
Typed Name:	Jesse L. Dorogusker	
Witnessed by:		
Witness' Signature:		Date:
Witness' Name:		

ASSIGNMENT

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(such inventions and improvements hereinafter referred to collectively as the "Inventions"), which application was filed in the United States Patent and Trademark Office on August 8, 2014, and accorded U.S. Patent Application No. 14/455,287 (the "Application(s)");

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ALSO, I/We, the undersigned, hereby authorize and request the Commissioner for Patents of the United States and any official of any country or countries foreign to the United States whose duty it is to issue Letters Patent or similar legal rights on applications aforesaid, to issue all such Letters Patent or similar rights for the Inventions to the Assignee, as assignee of the entire right, title and interest in and to the same, for the Assignee's own use and benefit, and for the use and benefit of the Assignee's successors, assigns and legal representatives, to the full end of the term for which such Letters Patent or similar rights may be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned had this assignment not been made.

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ALSO, I/We, the undersigned, hereby covenant and agree to execute and deliver to Assignee, its successors, assigns and/or legal representatives all instruments and documents that legally may be required, necessary or desirable in connection with the filing, prosecution, litigation, maintenance, enforcement and defense of the above-described Application or any other application for patent which has been or shall be filed in the United States and its territorial possessions and/or in any foreign countries for the Inventions, including any additional documents or instruments of transfer to affirm the rights of Assignee, its successors, assigns and/or legal representatives in and to said Inventions, all without further consideration. I/We, the undersigned, also agree, without requesting or receiving additional consideration from Assignee, but at Assignee's expense, to identify and communicate to Assignee, its successors, assigns and/or legal representatives all facts known to the undersigned relating to the Inventions and the history thereof, and to provide further assurances and testimony on behalf of Assignee, its successors, assigns and/or legal representatives that lawfully may be required, necessary or desirable in respect of the filing, prosecution, litigation, maintenance, enforcement and defense of any patent application or Letters Patent encompassed within the terms of this assignment. The undersigned's obligations under this assignment shall extend to the undersigned's heirs, executors, administrators and legal representatives.

ALSO, I/We, the undersigned, covenant and agree that no assignment, grant, mortgage, license or other agreement encumbering the rights and property herein conveyed has been made to others by the undersigned, and that the full right to convey the same as expressed herein is possessed by the undersigned.

ALSO, I/We, the undersigned, hereby grant Assignee's legal representatives, of **Perkins Cole LLP**, the power to insert on this assignment any further identification which may be necessary or desirable for recordation of this assignment, including inserting the application serial number and filing date when known.

IN WITNESS WHEREOF, the undersigned has/have executed this assignment as of the date(s) indicated below.

Inventor's Signature:	11-5/-	Date: 1/24/16
Typed Name:	Thomas Templeton	
Witnessed by:	Cherry Harman	Date: 1/29/2016
Witness' Signature: Witness' Name	Cheryl Harman	

2/4

Inventor's Signature:		Date:
Typed Name:	Alexey Kalinichenko	
Witnessed by: Witness' Signature: Witness' Name:		Date:
Inventor's Signature: Typed Name:	Andrew Borovsky	Date:
Witnessed by: Witness' Signature: Witness' Name:		Date:

Inventor's Signature:		Date:
Typed Name:	Paul Aaron	
Witnessed by: Witness' Signature: Witness' Name:		
Inventor's Signature: Typed Name:	Jesse L. Dorogusker	Date:
Witnessed by: Witness' Signature: Witness' Name:		Date:

ASSIGNMENT BY INVENTORS

This Assignment is by Thomas Templeton, Alexey Kalinichenko, Andrew Borovsky, Paul Aaron and Jesse L. Dorogusker (the "Assignors"). The Assignors invented one or more certain inventions (the "Invention(s)") described in an application for Letters Patent of the United States titled CONTROLLED EMULATION OF PAYMENT CARDS, and filed on August 8, 2014 as U.S. Application No. 14/455,287 (the "Application").

Square, Inc., a Corporation of Delaware having its principal place of business at 1455 Market Street, Suite 600, San Francisco, California 94103 (the "Assignee"), desire to acquire the entire right, title and interest in and to the Invention(s) and the Application, and in and to any patents (collectively, "Patents") that may be granted for the Invention(s) in the United States or in any foreign countries.

For valuable consideration, the receipt and sufficiency of which Assignors acknowledge, Assignors hereby sell, assign, and transfer to Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to: the Invention(s), the Application, and any Patents; any divisions, continuations, and continuations-in-part of the Application and any other application claiming priority rights from the Application; any reissues, reexaminations, or extensions of any and all Patents; the right to file foreign applications directly in the name of Assignee; and the right to claim priority rights deriving from the Application (collectively, the "Rights"). Assignors warrant that Assignors own the Rights, and that the Rights are unencumbered. Assignors also agree to not sign any writing or do any act conflicting with this assignment, and, without further compensation, sign all documents and do such additional acts as Assignee deem necessary or desirable to: perfect Assignee's enjoyment of the Rights; conduct proceedings regarding the Rights, including any litigation or interference proceedings; or perfect or defend title to the Rights. Assignors request the Commissioner of Patents to issue any Patent of the United States that may

Page 1 of 3

078494-8078.US01 (SQ-0251-US)

Date	Paul Aaron
Witness:	
Date	
11/11/14	/s/n///
Date /	Jesse L. Dørogusker
Vitness:	
Date	- OUSa Yalas

RECORDED: 01/30/2018