

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4053421

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
EDISON U. ORTIZ	01/29/2015
TERRY W. LEE	01/29/2015
LINDA MANTIA	01/29/2015
RECEIVING PARTY DATA	
Name:	ROYAL BANK OF CANADA
Street Address:	1 PLACE VILLE MARIE, 6TH FLOOR
City:	MONTREAL
State/Country:	CANADA
Postal Code:	H3C 3A9
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14705477
CORRESPONDENCE DATA	
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<i>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.</i>	
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Correspondent Name:	DICKINSON WRIGH PLLC
Address Line 1:	1825 EYE ST. N.W., SUITE 900
Address Line 4:	WASHINGTON, D.C. 20006
ATTORNEY DOCKET NUMBER:	41609-18
NAME OF SUBMITTER:	MATTHEW J. MARQUARDT
SIGNATURE:	/Matthew J. Marquardt/
DATE SIGNED:	09/15/2016
Total Attachments: 7	
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Assignment - Worldwide

ASSIGNMENT (Worldwide)

WHEREAS,

- (1) **Edison U. ORTIZ** of Orlando, Florida, U.S.A.,
- (2) **Terry W. LEE** of Toronto, Ontario, Canada, and
- (3) **Linda MANTIA** of Toronto, Ontario, Canada

hereinafter referred to, separately and collectively, as "ASSIGNORS", and whose full post office address is c/o Royal Bank of Canada, 6th Floor, North Wing, 1 Place Ville Marie, Montreal, Quebec, H3C 3A9, Canada, have jointly and/or severally made one or more inventions relating to and entitled:

SECURE PROCESSING OF TRANSACTION DATA

hereinafter referred to as the Invention, which Invention is described in one or more applications for Letters Patent identified as:

Country: Canada

Application Number: 2830260

Filed: October 17, 2013

Title: VIRTUALIZATION AND SECURE PROCESSING OF DATA

Country: United States

Application Number: 14/056,440

Filed: October 17, 2013

Title: VIRTUALIZATION AND SECURE PROCESSING OF DATA

Country: United States

Application Number: 14/142,072

Filed: December 27, 2013

Title: VIRTUALIZATION AND SECURE PROCESSING OF DATA

Country: United States

Application Number: 14/287,134

Filed: May 26, 2014

Title: VIRTUALIZATION AND SECURE PROCESSING OF DATA

Country: United States

Application Number: 61/715142

Filed: October 17, 2012

Title: SECURE PROCESSING AND STORAGE PAYMENT DATA

Country: United States

Application Number: 61/811783

Filed: April 14, 2013

Title: SECURE PROCESSING AND STORAGE PAYMENT DATA

Country: United States

Application Number: 61/825865

Filed: May 21, 2013

Title: SECURE PROCESSING AND STORAGE PAYMENT DATA

Country: United States

Application Number: 61/833188

Filed: June 10, 2013

Title: SECURE PROCESSING AND STORAGE PAYMENT DATA

Country: United States

Application Number: 61/863593

Filed: August 8, 2013

Title: SECURE PROCESSING AND STORAGE PAYMENT DATA

Country: United States

Application Number: 62/056,688

Filed: September 29, 2014

Title: SECURE PROCESSING OF TRANSACTION DATA

Country: United States

Application Number: 62/058,799

Filed: October 2, 2014

Title: SECURE PROCESSING OF TRANSACTION DATA

Country: United States

Application Number: 62/065,280

Filed: October 17, 2014

Title: SECURE PROCESSING OF TRANSACTION DATA

Country: United States

Application Number: 62/078,683

Filed: November 12, 2014

Title: SECURE PROCESSING OF DATA

hereinafter referred to as the Applications;

AND WHEREAS, ROYAL BANK OF CANADA, a Canadian Chartered Bank hereinafter referred to as Assignee, whose full post office address is 6th Floor, North Wing, 1 Place Ville Marie, Montreal, Quebec H3C 3A9, Canada, desires among other things to acquire Assignors' entire right, title, interest and benefit for the United States, Canada and all other countries and jurisdictions in and to the Invention and Applications;

NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors hereby confirm that they have sold, assigned, transferred and set over to Assignee and, for greater certainty, do hereby sell, assign, transfer and set over to Assignee, and to Assignee's

successors, assigns, nominees or other legal representatives, their entire right, title, interest, property and benefit in and for United States, Canada and all other countries and jurisdictions in and to the Invention, together with their entire right, title, interest, property and benefit in and to the Applications, and any applications corresponding thereto in any country or jurisdiction, including any and all corresponding applications whether in the form of divisions, continuations, re-examinations, re-issues and extensions thereof, any and all Letters Patent and Registrations that may issue, be granted or result therefrom for the Invention, and any and all rights of priority resulting from the filing of the above-identified applications, the said corresponding applications and any previously filed applications in respect of the Invention under international conventions, treaties or otherwise, the same to be held and enjoyed as fully and exclusively as the same would have been held and enjoyed by Assignors had this sale, assignment, transfer and setting over not been made;

AND ASSIGNORS, on behalf of themselves and their heirs, executors and administrators, do hereby covenant and agree to do all such lawful acts and things and to execute and deliver without further consideration such further lawful assignments, instruments, assurances, applications and other documents as may reasonably be required by said Assignee, or by its successors, assigns, nominees, or other legal representatives, to obtain each said Letters Patent and Registrations of the United States and all other countries and jurisdictions for the Invention and vest or secure the same in Assignee, and in Assignee's successors, assigns, nominees or other legal representatives.

AND ASSIGNORS do hereby authorize any official whose duty it is to grant patents or registrations, to grant each said Letters Patent and Registration for the Invention to the Assignee, and to Assignee's successors, assigns, nominees or other legal representatives.

AND ASSIGNORS, on behalf of themselves and their heirs, executors and administrators, do hereby authorize said Assignee, its successors, assigns, nominees or other legal representatives, including its Patent Agents, Dickinson Wright LLP, to amend the present assignment document to insert or correct the filing date, serial number or other identifying information of the Application as may be needed to record same.

ASSIGNORS UNDERSTAND AND AGREE that the attorneys and agents of the law firm of Dickinson Wright LLP do not personally represent Assignors or Assignors' legal interests, but instead represent the interests of Assignee. Since Dickinson Wright LLP cannot provide legal advice to Assignors with respect to this Assignment, Assignors acknowledge their right to seek their own independent legal counsel.

THIS ASSIGNMENT may be executed in counterparts, all of which shall be considered one and the same agreement. This Assignment shall be effective to transfer an Assignors' entire right, title, interest, property, and benefit to Assignee upon execution of this Assignment by such Assignors, regardless of whether any other Assignor executes this Agreement.

IN WITNESS WHEREOF, Assignors have hereunto signed their names on the day and year set forth below.

DATED this 29 day of January, 2015, 2014.

Edison U. ORTIZ

Per: [Signature]

Name: Edison U. Ortiz

Title: Head, Mobile INNOVATION

STATEMENT OF WITNESS

I, Jennifer M., state that I was personally present and did see
(name of witness)

Edison U. ORTIZ, who is personally known to me to be the
person (name of authorized signing officer/inventor)

named in the above assignment, duly execute the same on the day and year set forth above.

[Signature]
(signature of witness)

Terry W. LEE

Per: _____

Name: _____

Title: _____

[Signature]
Terry W. Lee
DIRECTOR of R&D

STATEMENT OF WITNESS

I, Jennifer Mo, state that I was personally present and did see
(name of witness)

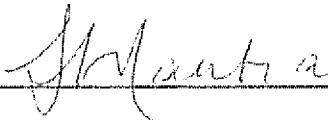
Terry W. Lee, who is personally known to me to be the (name
of authorized signing officer/inventor)

person named the above assignment, duly execute the same on the day and year set forth above.

[Signature]

(signature of witness)

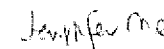
Linda MANTIA

Per: 

Name: **Linda Mantia**

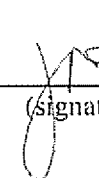
Title: **Executive Vice President, Digital, Payments & Cards**

STATEMENT OF WITNESS

I, , state that I was personally present and did see
(name of witness)

Linda MANTIA, who is personally known to me to be the
(name of authorized signing officer/inventor)

person named the above assignment, duly execute the same on the day and year set forth above.


(signature of witness)