PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT7493703

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|------------------------|----------------|
| KARIM TALAL HAMASNI | 04/01/2019 |
| STEFAN MUELLER | 04/02/2019 |
| ATILLA MURAT FIRAT | 04/01/2019 |
| MATTHEW THOMAS PESKETT | 04/02/2019 |

RECEIVING PARTY DATA

| Name: | ROYAL BANK OF CANADA |
|-------------------|----------------------------------|
| Street Address: | 200 BAY STREET, ROYAL BANK PLAZA |
| Internal Address: | 6TH FLOOR, SOUTH TOWER |
| City: | TORONTO, ON |
| State/Country: | CANADA |
| Postal Code: | M5J 2J5 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16373204 |

CORRESPONDENCE DATA

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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.

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NORTON ROSE FULBRIGHT CANADA LLP **Correspondent Name:**

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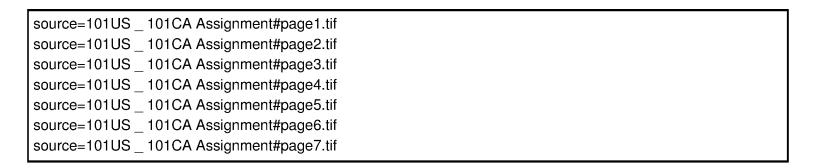
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| ATTORNEY DOCKET NUMBER: | 05007268-101US |
|-------------------------|----------------|
| NAME OF SUBMITTER: | BRIAN CHAU |
| SIGNATURE: | /Brian Chau/ |
| DATE SIGNED: | 08/18/2022 |
| | • |

Total Attachments: 7

PATENT REEL: 060848 FRAME: 0815



PATENT REEL: 060848 FRAME: 0816

ASSIGNMENT (Worldwide)

WHEREAS,

- (1) Karim Talal HAMASNI of Toronto, ON, Canada;
- (2) **Stefan MUELLER** of Singapore, Singapore;
- (3) Atilla Murat FIRAT of Toronto, ON, Canada;
- (4) Matthew Thomas Peskett of Toronto, ON, 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 made an invention relating to and entitled:

SYSTEM AND METHOD FOR COMPOSITE CRYPTOGRAPHIC TRANSACTIONS

hereinafter referred to as the Invention, which Invention is described for example in the appended draft patent application (which may have been provided to Assignors prior to execution of this Assignment), which Invention is to be filed as one or more applications for Letters Patent 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 United States, Canada and all other countries and jurisdictions in and to the Invention and Application, or to confirm the ownership of such right, title, interest and benefit by Assignee;

NOW THEREFORE, in consideration of the sum of Five Dollars (\$5.00) 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 Application, and any previously- or subsequently-filed applications corresponding or otherwise relating thereto in any country or jurisdiction, including any and all corresponding applications whether in the form of divisions, continuations, re-examinations, re-issues, extensions and other non-provisional applications, and national phases 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 application, the said corresponding applications and

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any previously- or subsequently-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, Norton Rose Fulbright Canada 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 Norton

Rose Fulbright Canada LLP do not personally represent Assignors or Assignors' legal interests, but instead

represent the interests of Assignee. Since Norton Rose Fulbright Canada 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.

Page 2 of 7

| DATED this day of | April , 2019. |
|--|--|
| | Karim Talal HAMASNI |
| | 26 th |
| STATEMENT OF WITNESS | |
| I, ANDRE MAGALHAES (name of witness) | , state that I was personally present and did see |
| Karim Talal HAMASNI (name of inventor) | , who is personally known to me to be the person |
| named in the above assignment, duly exe | cute the same on the day and year set forth above. |
| | Andr. 4, 70001 |
| the second secon | (signature of witness) |

| DATED this 2 day of Apri | , 2019. |
|---|--|
| | Stefan MUELLER |
| | <u> 500-14</u> |
| STATEMENT OF WITNESS | |
| I, <u>FLORIAN LEBER</u> (name of witness) | _, state that I was personally present and did see |
| Stefan MUELLER (name of inventor) | , who is personally known to me to be the person |
| named in the above assignment, duly execute the | ne same on the day and year set forth above. |
| | Terin Leler |
| | (signature of witness) |
| | Or. Florian Leber Attomey-at-Law Luther LLP |

| | Atilla Murat FIRAT |
|--|---|
| | Managakan jalan |
| TATEMENT OF WITNESS | |
| Koray Gotwen (name of witness) | state that I was personally present and did see |
| Atilia Murat FIRAT (name of inventor) | |
| amed in the above assignment, duly exect | ute the same on the day and year set forth above. |
| | a/// |

| DATED this day of | 101) , 2019. |
|---|---|
| | Matthew Thomas Peskett |
| STATEMENT OF WITNESS | |
| I, <u>Karim Hamasni</u> (name of witness) | , state that I was personally present and did see |
| Matthew Thomas Peskett (name of inventor) | , who is personally known to me to be the person |
| named in the above assignment, duly execute t | the same on the day and year set forth above. |
| | 22 Al |
| | (signature of witness) |

| DATED this day of | April 2019 |
|--|---|
| | ROYAL BANK OF CANADA |
| | プログインモデ Michael Ladanyi |
| | Senior Counsel |
| STATEMENT OF WITNESS | |
| 1. <u>Kathleen Macfarlane</u> (name of witness) | , state that I was personally present and did see |
| Michael Ladanyi (name of signatory) | , who is personally known to me to be the person |
| named in the above assignment, duly execute th | e same on the day and year set forth above. |
| | (signature of witness) |

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RECORDED: 08/18/2022