

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT6588393

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MILOS DUNJIC	01/17/2019
ARTHUR CARROLL CHOW	04/16/2019
DAVID SAMUEL TAX	03/01/2021
ARMON ROUHANI	04/22/2019
ASAD JOHEB	04/16/2019
SARA HATHERLY	04/16/2019
KEITH SANJAY AJMANI	02/16/2021
LIONEL JOHNSON	04/16/2019
YUBLING LIU	02/20/2021
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	THE TORONTO-DOMINION BANK
<b>Street Address:</b>	66 WELLINGTON STREET WEST, TD TOWER, 15TH FLOOR
<b>City:</b>	TORONTO, ONTARIO
<b>State/Country:</b>	CANADA
<b>Postal Code:</b>	M5K 1A2
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16371594
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(202)776-7801
<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>	
<b>Phone:</b>	2027767800
<b>Email:</b>	lrhayes@duanemorris.com
<b>Correspondent Name:</b>	DUANE MORRIS LLP
<b>Address Line 1:</b>	505 9TH STREET, NW, SUITE 1000
<b>Address Line 4:</b>	WASHINGTON, D.C. 20006
<b>ATTORNEY DOCKET NUMBER:</b>	G4144-00280
<b>NAME OF SUBMITTER:</b>	JAMES A. COOKE, III

<b>SIGNATURE:</b>	/James A. Cooke, III/
<b>DATE SIGNED:</b>	03/08/2021
<b>Total Attachments: 11</b> source=ASSIGNMENT#page1.tif source=ASSIGNMENT#page2.tif source=ASSIGNMENT#page3.tif source=ASSIGNMENT#page4.tif source=ASSIGNMENT#page5.tif source=ASSIGNMENT#page6.tif source=ASSIGNMENT#page7.tif source=ASSIGNMENT#page8.tif source=ASSIGNMENT#page9.tif source=ASSIGNMENT#page10.tif source=ASSIGNMENT#page11.tif	

**WORLDWIDE ASSIGNMENT**

WHEREAS, WE, (hereinafter referred to as the “ASSIGNORS”):

Milos DUNJIC,  
Arthur Carroll CHOW,  
David Samuel TAX,  
Armon ROUHANI,  
Asad JOHEB,  
Sara HATHERLY,  
Keith Sanjay AJMANI,  
Lionel JOHNSON, and  
Yubing LIU,

have invented a certain new and useful invention entitled:

**RECONCILIATION OF INDIRECTLY EXECUTED EXCHANGES OF DATA  
USING PERMISSIONED DISTRIBUTED LEDGERS**

for which a United States Patent application was filed on April 1, 2019, and accorded application serial number 16/371,594 (further identified by Attorney Docket No. G4144-00280 and TD Reference No. 18055-PMT-US-PAT, hereinafter the “Patent Application”), and

WHEREAS, **The Toronto-Dominion Bank** (hereinafter “**Assignee**”), a corporation organized under the laws of the Province of Ontario, CANADA, having a place of business at 66 Wellington Street West, TD Tower, 15<sup>th</sup> Floor, Toronto, Ontario, M5K 1A2, has acquired or is desirous of acquiring the entire and exclusive right, title and interest in and to the Patent Application inclusive of any and all priority rights derived therefrom and the inventions therein disclosed or claimed, and in and to all Letters Patent, in the United States of America, Canada, and throughout the world, which may be granted and issued therefore throughout the world;

NOW THEREFORE, for valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each of the undersigned, WE, ASSIGNORS do hereby sell, assign, transfer, and set over to the ASSIGNEE, its successors and assigns, the entire and exclusive right, title and interest in and to the Patent Application for United States Letters Patent inclusive of any and all priority rights derived therefrom, and the inventions therein disclosed or claimed, and in and to all Letters Patent and issues thereof which may be granted upon the Patent Application and in and to all Letters Patent which may be issued upon any substitutes, continuations, continuations-in-part, divisions, re-issues or extensions of the Patent Application or Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, and in and to any and all Letters Patent which may be granted for the inventions in any foreign country or countries including priority rights derived from any application for the inventions in any country;

AND WE, ASSIGNORS, hereby agrees/agree to execute, upon request, any and all further papers without charge which may be necessary or desirable to enable the ASSIGNEE, its successors and assigns, to file and prosecute the Patent Application, and any and all substitutes, continuations, continuations-in-part, divisions, or extensions thereof, and any and all reissues of the Letters Patent granted upon the Patent Application, and any and all applications for foreign Letters Patent on the inventions; and ASSIGNORS further agree to execute any and all further papers without charge which may be necessary or desirable to vest or perfect the title of ASSIGNEE, its successors and assigns, in and to the Patent Application and the inventions therein disclosed or claimed, and in and to any and all Letters Patent and reissues thereof, in the United States of America, Canada, and foreign countries, which may be granted upon the Patent Application, and any substitutes, continuations, continuations-in-part, divisions, re-issues or extensions thereof, and upon any foreign applications;

AND WE, ASSIGNORS hereby authorize and request the Patent Office to issue each and every Letters Patent to be granted upon the Patent Application for United States Letters Patent, and upon any and all substitutes, continuations, continuations-in-part, divisions, or extensions of the Patent Application, and each and every reissue of the Letters Patent, to the ASSIGNEE, its successors and assigns, as the assignee of the entire right, title and interest therein, in accordance with this assignment;

AND WE, ASSIGNORS each individually hereby represent and warrant that I have read and fully understand the terms and provisions hereof, have had an opportunity to obtain independent legal advice, and have executed this assignment based upon my own judgment and advice of independent legal counsel (if sought), or alternatively, have waived the right to obtain independent legal counsel.

**Inventor 1:**

EXECUTED at (City, Province) Toronto, ON, this 17 day of Jan, 2019

  
\_\_\_\_\_  
Milos DUNJIC

STATEMENT BY WITNESS

I, Ashkan Alavi-Harati, whose full Post Office address is  
66 Wellington St. W., Toronto, ON M5K 1A2 was  
personally present and did see the above named person, who is known to me, execute the above  
Assignment.

  
\_\_\_\_\_  
(Signature of Witness)


Inventor 2:

EXECUTED at (City, Province) Toronto, ON, this 16 day of April, 2019

  
\_\_\_\_\_  
Arthur Carroll CHOW

STATEMENT BY WITNESS

I, Madalina Hinnear, whose full Post Office address is  
66 Wellington St. W., 15<sup>th</sup> Floor, Toronto, ON M5K 1A2 was  
personally present and did see the above named person, who is known to me, execute the above  
Assignment.

  
\_\_\_\_\_  
(Signature of Witness)

**Inventor 3:**

EXECUTED at (City, Province) Toronto, Ontario, this 1st day of March, 2021

David Samuel TAX

David Samuel TAX

STATEMENT BY WITNESS

I, Lais Leal, whose full Post Office address is  
3-122 Glen Manor Dr, Toronto, ON, Canada M4E 2X6 was  
personally present and did see the above named person, who is known to me, execute the above  
Assignment.

\_\_\_\_\_  
(Signature of Witness)

Inventor 4:

EXECUTED at (City, Province) Toronto, ON, this 22 day of April, 2019

  
Arman ROUHANI

STATEMENT BY WITNESS

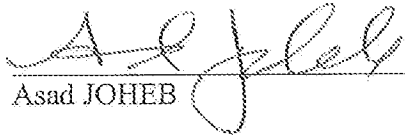
I, Madelina Kinnear, whose full Post Office address is  
66 Wellington St. W, 15<sup>th</sup> Floor, Toronto, ON M5H 1A2 was  
personally present and did see the above named person, who is known to me, execute the above  
Assignment.

  
(Signature of Witness)



Inventor 5:

EXECUTED at (City, Province) Toronto, ON, this 16 day of April, 2019

  
Asad JOHEB

STATEMENT BY WITNESS

I, Madalina Kinnear, whose full Post Office address is  
66 Wellington St. W., 15<sup>th</sup> Floor, Toronto, ON M5H 1A2 was  
personally present and did see the above named person, who is known to me, execute the above  
Assignment.

  
(Signature of Witness)

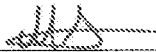
Inventor 6:

EXECUTED at (City, Province) Toronto, ON, this 16 day of April, 2019

  
Sara HATHERLY

STATEMENT BY WITNESS

I, Madalina Minnear, whose full Post Office address is  
66 Wellington St W, 15<sup>th</sup> Floor, Toronto, ON M5H 1A2 was  
personally present and did see the above named person, who is known to me, execute the above  
Assignment.

  
(Signature of Witness)

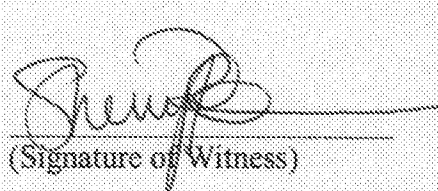
Inventor 7:

EXECUTED at (City, Province) Toronto, ON, this 16 day of Feb, 2021

  
Keith Sunjay AJMAN

STATEMENT BY WITNESS

I, Sherry Pedersen-Ajmani, whose full Post Office address is  
6 FIRST AVE, TORONTO, ON M4M 1W8 CANADA was  
personally present and did see the above named person, who is known to me, execute the above  
Assignment.

  
(Signature of Witness)

**Inventor 8:**

EXECUTED at (City, Province) TORONTO, ON, this 16 day of APRIL, 2019




Lionel JOHNSON

STATEMENT BY WITNESS

I, CINDY MAMONTOW, whose full Post Office address is

66 WELLINGTON ST. W. M5K 1A2 was

personally present and did see the above named person, who is known to me, execute the above Assignment.

  
(Signature of Witness)

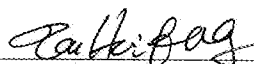
**Inventor 9:**

EXECUTED at (City, Province) Toronto, ON, this 20 day of February, 2021

  
Yubing LIU

STATEMENT BY WITNESS

I, TAN, Hui feng, whose full Post Office address is  
67 Sylvestre Sq. Scarborough, ON, M1W 3V1 was  
personally present and did see the above named person, who is known to me, execute the above  
Assignment.

  
(Signature of Witness)