506154410 07/15/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6201142

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
AVINASH MALLIAH	12/01/2016
ROISIN L. FRITZ	01/09/2017
JONATHAN K. BARNETT	12/08/2016
JOHN JONG SUK LEE	01/16/2017
PAUL MON-WAH CHAN	02/08/2017
ORIN DEL VECCHIO	02/07/2017

RECEIVING PARTY DATA

Name:	THE TORONTO-DOMINION BANK
Street Address:	66 WELLINGTON STREET WEST
Internal Address:	12TH FLOOR, TD TOWER
City:	TORONTO
State/Country:	CANADA
Postal Code:	M5K 1A2

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15286422

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	50547-3104
NAME OF SUBMITTER:	ROBERT GRAHAM
SIGNATURE:	/RJG/
DATE SIGNED:	07/15/2020

PATENT REEL: 053215 FRAME: 0054

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ASSIGNMENT

WHEREAS, WE:

MALLIAH, Avinash FRITZ, Roisin L. BARNETT, Jonathan K. LEE, John Jong Suk CHAN, Paul Mon-Wah DEL VECCHIO, Orin

(hereinafter the "Assignors"), whose respective postal addresses are:

c/o The Toronto-Dominion Bank 66 Wellington Street, 12th Floor, TD Tower Toronto, Ontario, M5K 1A2, CANADA

invented a certain new and useful invention entitled:

TOKEN-BASED SYSTEM FOR EXCISING DATA FROM DATABASES

for which a United States Provisional Patent Application was filed on **04 November 2015** and accorded application serial number **62/250,817**, a United States Patent Application was filed on **05 October 2016** and accorded application serial number **15/286,422**, and a Canadian Patent Application was filed on **27 October 2016** and accorded application serial number (hereinafter the "Patent Applications"), and

WHEREAS, The Toronto-Dominion Bank (hereinafter the "Assignee"), whose postal address is 66 Wellington Street, 12th Floor, TD Tower, Toronto, Ontario, M5K 1A2, Canada, is desirous of acquiring the entire and exclusive right, title and interest in and to said invention and said Patent Applications and in and to any Letters Patent which may be granted and issued therefore throughout the world;

NOW THEREFORE, the Assignors hereby sell, assign and transfer, to the Assignee, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the entire and exclusive right, title, and interest in and to said invention in Canada, the U.S., and throughout the world, any improvements thereto, said Patent Applications, any patent applications, including any divisional and continuation patent applications, claiming priority therefrom or claiming the benefit thereof, including the right to file said patent applications identifying the Assignee as applicant, and any Letters Patent, including any re-issue patents, which may be granted and issued therefore in Canada, the U.S., and throughout the world. The Assignors further authorize the Assignee's patent agent to amend this Assignment document, after execution by the Assignors, to include the serial number of said Canadian Patent Application.

The Assignors DECLARE that they (i) authorized said Patent Applications, (ii) believe that they are the original inventors of the invention claimed in said Patent Applications, and (iii) acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years or both.

The Assignors AGREE to do all things reasonably required of them, and to execute all instruments submitted to them by the Assignee, for the purpose of carrying out the full intent of this Assignment, including perfecting this sale, assignment and transfer of the invention, the Patent Applications to the

Assignee, and hereby request and authorize the Patent Office to issue the said Letters Patent to the Assignee, its successors and assigns. STATEMENT BY WITNESS whose full post office address is

Wellington St. W., 15th Flow, TWANTO, W MSK 14-2

was personally present and did see Avinash MALLIAH who is known to me, execute the above Assignment. **EXECUTED** at ______, this _____ day of ______, 2016 Roisin L. FRITZ STATEMENT BY WITNESS office address is full whose post I, was personally present and did see Roisin L. FRITZ who is known to me, execute the above Assignment.

2 of 4

Signature of Witness

Assignee, and hereby request and authorize the Patent Office to issue the said Letters Patent to the Assignee, its successors and assigns.
EXECUTED at, this day of, 2016
Avinash MALLIAH
STATEMENT BY WITNESS
I, whose full post office address is
was personally present and did see
Avinash MALLIAH who is known to me, execute the above Assignment.
Signature of Witness
EXECUTED at Tovonto, this 9 day of January, 2016 7 Roisin L. FRITZ
STATEMENT BY WITNESS
I, William St. W. ISTA Flav Tawwas personally present and did see Roisin L. FRITZ who is known to me, execute the above Assignment.
Signature of Witness 2 of 4

EXECUTED at	, this	B ^{ru} day	of De	ecember	, 2016	•
		nathan K	An A			
STATEME	ENT BY W	ITNESS				
I, Nicole Alvarez 1010 Wellington St. W. 15th Floor	whose	full	post 15K/A person	office ally preser	address	is see
Jonathan K. BARNETT who is known to me	, execute th	ie above A	Assignm	ent.		
	Sig	nature of	Mán. Witness	9		
EXECUTED at	, this	da <u>y</u>	y of		, 2016	
	T.)	hn Jong S	SI. T TET	7		
	JO	nn Jong a	SUK LEI	<u>.</u>		
STATEMI	ENT BY W	ITNESS				
I,	whose	full	post s person	office	address	is see
John Jong Suk LEE who is known to me, exc	ecute the ab		•	• •		
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	\overline{Sig}	gnature oj	^c Witness	•	***************************************	

EXECUTED at	, this	day of	, 201	6
	Jor	nathan K. BAR	NETT	
ST	ATEMENT BY W	ITNESS		
Ι,	whose	_	office address	
Jonathan K. BARNETT who is known	wn to me, execute th	ne above Assigni	ment.	
	\overline{Sig}	nature of Witnes	SS	
EXECUTED at form ho.	<u>Oa</u> f , this <u>/</u>	day of	Tonworey, 201	T5€ € F
	$\frac{\sqrt{2}}{J_0}$	hn Jong Suk LI	EE	
ST	TATEMENT BY W	ITNESS		
I, Wicole A Wavez John Jong Suk LEE who is known to	whose Sh Floor TOV One, execute the above	full post MAD ON was perso bove Assignmen	office addresonally present and oft.	s is
	Się	gnature of Witne	ss	

EXECUTED at Toronho	, this day of <u>kumury</u> . 20167 ³⁵
	Paul Mon-Wah CHAN
STATE	EMENT BY WITNESS
I, John 5 (ce Wellersponds for	whose full post office address is was personally present and did see
Paul Mon-Wah CHAN who is known to	me, execute the above Assignment.
	Signature of Witness
EXECUTED at	, this day of, 2016
	Orin DEL VECCHIO
STATI	EMENT BY WITNESS
Ι,	whose full post office address is was personally present and did see
Orin DEL VECCHIO who is known to n	ne, execute the above Assignment.
	Signature of Witness

EXECUTED at	, this	day of	, 2016
	Paul	Mon-Wah Cl	HAN
	STATEMENT BY WIT	TNESS	
Ι,		full post was perso	office address is
Paul Mon-Wah CHAN who is kn	nown to me, execute the a	bove Assignm	ent.
	Sign	ature of Witnes	SS
EXECUTED at for on	, this	day of	February, 2018;7
	<u>O</u> Oria	OLL VECC	<u>(</u> -
	STATEMENT BY WI		
1, Sohn & Cee 66 Welling	lon, toronto	was perso	onally present and did see
Orin DEL VECCHIO who is kno	own to me, execute the al	bove Assignme	ent.
	Sign	pature of Witne	