# 504710471 01/02/2018

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4757193

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
ARTHUR E. UBER III	12/04/2017
KEVIN COWAN	12/01/2017
DAVID M. GRIFFITHS	12/04/2017
IVANA KINGSTON	12/12/2017
ROEY FLOR	12/06/2017
HENRY HERNAEZ	12/19/2017
SRIDHAR BALASUBRAMANIAN	12/01/2017
DZMITRY LIUSHTYK	12/06/2017
MATTHEW HOIKO	12/06/2017
ROBERT REDMOND	12/14/2017

### **RECEIVING PARTY DATA**

Name:	BAYER HEALTHCARE LLC
Street Address:	100 BAYER BLVD
City:	WHIPPANY
State/Country:	NEW JERSEY
Postal Code:	07981

# **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15553317

### **CORRESPONDENCE DATA**

Fax Number:

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.

Email: RIPATENTS@BAYER.COM
Correspondent Name: BAYER HEALTHCARE LLC

Address Line 1: 1 BAYER DRIVE

Address Line 4: INDIANOLA, PENNSYLVANIA 15051

ATTORNEY DOCKET NUMBER:	BHC159004 PCT-US
NAME OF SUBMITTER:	JOSEPH L. KENT REG. NO. 54,216

PATENT 504710471 REEL: 044517 FRAME: 0269

/Joseph L. Kent/		
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Docket No.: BHC159004 PCT-

US

### ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below; and

Whereas, Bayer HealthCare LLC a corporation organized and existing under the laws of the State of Delaware and having a place of business at 100 Bayer Boulevard, Whippany, NJ 07981, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors, legal representatives, and assigns, the entire right, title and interest in the invention and the application for the United States of America, including all direct and indirect divisions, continuations, and continuations-in-part thereof, and all original, extended, reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be granted thereon, including rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee, its successors, legal representatives, or assigns. I/We further represent and warrant that I/We have the full right to convey the interest assigned by this assignment, and that I/We have not granted any rights inconsistent with the rights granted herein. I/We further acknowledge an obligation of assignment of this invention to assignee at the time the invention was made and we further irrevocably designate and appoint assignee and its counsel as my/our attorney-in-fact and agent to act for and on my/our behalf to execute and file any document and to do all other lawfully permitted acts to further the purposes of this Agreement with the same legal force and effect as if executed by assignor himself/herself. I/We acknowledge that assignee is the real party in interest to any and all patent applications described in connection with this Agreement, and to any and all patent rights gran

the below			

This Assignment with Declaration is directed to:		The attached application, or
	×	United States Application or PCT International Application Number 15/553,317 filed on August 24, 2017
		(Confirmation No.6399).
The application is entitled: Quantification Phantom for	Use with I	Multiple Imaging Modalities

The above identified application was made or was authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application and I am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR 1.56.

I hereby acknowledge that any willful false statement made in this Assignment with Declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

### Authorization To Permit Access To Application by Participating Office

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In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Office.

NAME OF SOLE OR FIRST I	VENTOR:		
Given Name			
(first and middle [if any]): Arthu	r E.	Family Name	or Surname: Uber, III
Inventor's signature	Bath E Wen	. T.C.	page 4,2017
Residence: City: Pittsburgh	State: PA	Country: U.S.	Citizenship
Mailing Address: <b>7426 Ben Hur</b>	Street, Pittsburgh, PA 15208 U.S.		
NOTARIZATION			
	thority, on this day personally appears and acknowledged to me that he/she e and seal of office, this	xecuted the same for	III, known to me to be the person the purposes and consideration therein ハルス・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・
Notary Public Signature	Cen	Notary Public Printed Name	Jannifor M Pac
[seal]		[stamp]	COMMONWEALTH OF PENNSYLVANIA  NOTARIAL SEAL  Jennifer M. Rae, Notary Public Indiana Twp., Allegheny County My Commission Expires Feb. 26, 2020

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NAME OF SECOND INVENT	OŘ:			
Given Name				
(first and middle [if any]): Kevin	1	Family	Name or Surname: Cowan	
Inventor's signature	P Coury		Date / DCC 20 //	
Residence: City: Allison Park	State: PA	Country: U.:		
Mailing Address: 4242 Estates C	Mailing Address: 4242 Estates Court, Allison Park, PA 15101 U.S.			
NOTARIZATION  BEFORE ME, the undersigned authority, on this day personally appeared Kevin Cowan, known to me to be the person whose name is subscribed above, and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed.  Given under my hand and seal of office, this for day of the purposes and consideration therein expressed.				
Notary Public Signature	Men	Notary I Printed	Name: Jannifey M. Kak	
[seal]		[stamp]	COMMONWEALTH OF PENNSYLVANIA  NOTARIAL SEAL  Jennifer M. Ras, Notary Public Indians Twp., Allegheny County  My Commission Expires Feb. 26, 2020	

NAME OF THIRD INVENTOR	<b>}</b> :		**********************	
Given Name				
(first and middle [if any]): David	pM <sub>2</sub>	Family Name o	r Surname: Gri	ffiths
Inventor's signature	Jai My Line	>	<b>}</b>	10:23 AM EST
Residence: City: Pittsburgh	State: PA	Country; U.S.		Citizenship USA
······	treet, Pittsburgh, PA 15208 U.S.			
NOTARIZATION  BEFORE ME, the undersigned authority, on this day personally appeared David Griffiths, known to me to be the person whose name is subscribed above, and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed. Given under my hand and seal of office, this     A   A   A   A   A   A				
Notary Public JAN Signature JAN	Cen	Notary Public Printed Name:		er W.Cae
[seal]		[stamp]	NOTA Jennifer M. I Indiana Twp. Ay Commission	H-OF-PENNSYLVANIA  IRIAL SEAL Rae, Notary Public , Allegheny County Expires Feb. 26, 2020 (A ASSOC ATION OF NOTARIES

NAME OF FOURTH INVENTOR:			
Given Name			
(first and middle [if any]): Ivana	Family Name or Surname: Kingston		
Inventor's signature	Date (2, Dec., 2017		
Residence: City: Pittsburgh State: PA	Country: U.S. Chizenship		
Mailing Address: 5605 Ellsworth Avenue, Pittsburgh, PA 15232 U.	s.		
NOTARIZATION			
BEFORE ME, the undersigned authority, on this day personally appeared Ivana Kingston, known to me to be the person whose name is subscribed above, and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed. Given under my hand and seal of office, this \( \) day of \( \)			
Notary Public Signature	Notary Public Printed Name: JCFNNGCA WI KOM		
[seal]	[stamp] COMMONWEALTH OF PENNSYLVANIA  NOTARIAL SEAL  Jennifer M. Ree, Notary Public  Indiana Twp., Allegheny County  My Commission Expires Feb. 26, 2020		

NAME OF FIFTH INVENTOR:		
Given Name		
(first and middle [if any]): Dzmitry	Family Name or Surn	ame: Liushtyk
Inventor's signature	***************************************	Date
Residence Address: 64 Bloomgate Crescent, Richmond Hill, ON L4E 4	E2 CA	Citizenship:
Mailing Address: 64 Bloomgate Crescent, Richmond Hill, ON L4E 4E	e CA	
NOTARIZATION  BEFORE ME, the undersigned authority, on this day personally appeared D	zmitry Liushtyk, known	to me to be the person whose
name is subscribed above, and acknowledged to me that he/she executed the expressed. Given under my hand and seal of office, this	e same for the purposes an ry of	d consideration therein , 20
Notary Public	Notary Public	
Signature	Printed Name:	
[seal]	[stamp]	
NAME OF SIXTH INVENTOR:		
Given Name	4. 6. 8.	
(first and middle [if any]): Matthew	Family Name or Sum	ame: Hoiko
Inventor's signature		Date
ar east o againman	***************************************	
Residence Address:375 King Street West, Apartment 407, Toronto, O.	VM5V IK1 CA	Citizenship:

Mailing Address: 375 King Street West, Apartment 407, Toronto, ON M5V 1K1 CA

expressed. Given under my hand and seal of office, this

BEFORE ME, the undersigned authority, on this day personally appeared Matthew Hoiko, known to me to be the person whose name is subscribed above, and acknowledged to me that he/she executed the same for the purposes and consideration therein

day of

Notary Public

Printed Name:

[stamp]

NOTARIZATION

Notary Public

Signature

[seal]

, 20

NAME OF SEVENTH INVENTOR:			
Given Name			
(first and middle [if any]): Roey	Family Name or Surname: Flor		
Inventor's signature	Date 12/8//17		
Residence: City: Pittsburgh State: PA (	Date 13/86/67  Country: U.S. Citizenship Canada		
Mailing Address: 6480 Living Place, Apartment 518, Pittsburgh, PA			
NOTARIZATION  BEFORE ME, the undersigned authority, on this day personally appeared Roey Flor, known to me to be the person whose name is subscribed above, and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed.  Given under my hand and seal of office, this ( ) day of ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (			
Notary Public Signature	Notary Public Printed Name: Jenniler M. Kak		
[seal]	[stamp] COMMONWEALTH OF PENNSYLVANIA  NOTARIAL SEAL  Jennifer M. Rae, Notary Public  Indiana Twp., Allegheny County  My Commission Expires Feb. 26, 2020  MEUSER, RELIEF WAYLASSON AT ON OF HOTARIES		
	My Commission Expires Feb. 26, 2020		

NAME OF EIGHTH INVENTOR:			
Given Name			
(first and middle [if any]): Robert	Family Name or Surname: Redmond		
Inventor's signature	Date		
Residence Address: 1035 Hudson Drive, Kingston, ON K7M 5K5 CA	Citizenship:		
Mailing Address: 1035 Hudson Drive, Kingston, ON K7M 5K5 CA			
NOTARIZATION			
BEFORE ME, the undersigned authority, on this day personally appeared <b>Robert Redmond</b> , known to me to be the person whose name is subscribed above, and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed. Given under my hand and seal of office, this day of , 20			
Notary Public Signature	Notary Public Printed Name:		
[seal]	[stamp]		

NAME OF NINTH INVENTOR	<b>k</b> :		
Given Name			
(first and middle [if any]): Henry		Family Nan	ne or Surname: Hernaez
Inventor's signature			Date 12/19/2017
Residence: City: Pittsburgh	State: PA	Country: U.S.	Date 2/19/2017  Canadian Citizenship
Mailing Address: 1134 N Euclid	Avenue, Pittsburgh, PA 15206 U	i.S.	
	nowledged to me that he/she execu-	ted the same for the p	known to me to be the person whose purposes and consideration therein
Notary Public Signature	a	Notary Publ Printed Nam	ic Jennify May
[seal]		[stamp]	COMMONWEALTH OF PENNSYLVANIA  NOTARIAL SEAL Jennifer M. Rae, Notary Public Indiana Twp., Allegheny County My Commission Expires Feb. 26, 2020 NEUSER, PENNSYLVANIA ASSOCIATION OF NOTARIES

NAME OF TENTH INVENTOR:			
Given Name			
(first and middle [if any]): Sridhar	Family Name or Surname: Balasubramanian		
Inventor's signature BSA	Date 12/01/17		
Residence: City: Mars State: PA	Country: U.S. Citizenship NDIA		
Mailing Address: 826 Oneida Circle, Mars, PA 16046 U.S.			
NOTARIZATION  BEFORE ME, the undersigned authority, on this day personally appeared Sridhar Balasubramanian, known to me to be the person whose name is subscribed above, and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed. Given under my hand and seal of office, this			
Notary Public Signature	Notary Public Printed Name: Janna Car M. Care		
[seal]	[stamp] COMMONWEALTH OF PENNSYLVANIA  NOTARIAL SEAL  Jennifer M. Rise, Notary Public  Indiana Twp., Allegheny County  My Commission Expires Feb. 26, 2020  SEUSER PENNSYLVANIA ASSOCIATION OF NOTARIES		

Docket No.: BHC159004 PCT-

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### ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below; and

Whereas, Bayer Health Care LLC a corporation organized and existing under the laws of the State of Delaware and having a place of business at 100 Bayer Boulevard, Whippany, NJ 07981, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors, legal representatives, and assigns, the entire right, title and interest in the invention and the application for the United States of America, including all direct and indirect divisions, continuations, and continuations-in-part thereof, and all original, extended, reissued, reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be granted thereon, including rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee, its successors, legal representatives, or assigns. I/We further represent and warrant that I/We have the full right to convey the interest assigned by this assignment, and that I/We have not granted any rights inconsistent with the rights granted herein. I/We further acknowledge an obligation of assignment of this invention to assignee at the time the invention was made and we further irrevocably designate and appoint assignee and its counsel as my/our attorney-in-fact and agent to act for and on my/our behalf to execute and file any document and to do all other lawfully permitted acts to further the purposes of this Agreement with the same legal force and effect as if executed by assignor himself/herself. I/We acknowledge that assignce is the real party in interest to any and all patent applications described in connection with this Agreement, and to any and all patent r

As the below named inventor I hereby declare that:

This Assignment with Declaration is directed to:		The attached application, or
	×	United States Application or PCT International Application Number 15/533,317 filed on August 24, 2017
		(Confirmation No.6399).
The application is entitled: Quantification Phantom for Use	with !	Multiple Imaging Modalities

The above identified application was made or was authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application and I am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR 1.56.

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## Authorization To Permit Access To Application by Participating Office

If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, IPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.

in accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the application-as-filed with respect to: 1) the above-identified patent application-as-filed, 2) any foreign application to which the above-identified application claims priority under 35 USC 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above-identified patent application, and 3) any U.S. application-as-filed from which benefit is sought in the above-identified patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participation.

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NAME OF FIRST OR SOLE INVENTOR:	T	
Given Name		:
(first and middle [if any]): Dzmitry	Family Name or Surna	
Inventor's signature	ni.	Dec 06 2017
Inventor's signature		Date Dec ,
Residence Address: 64 Bloomgate Crescent, Richmond Hill, ON L4E 4E2 CA		Date Dee 06, 2017 Citizenship: CANADIAN
Mailing Address: 64 Bloomgate Crescent, Richmond Hill, ON L4E 4E2	CA	
NOTARIZATION		a me to be the norman tubices
BEFORE ME, the undersigned authority, on this day personally appeared D2 name is subscribed above, and acknowledged to me that he/she executed the	same for the nurnoses and	o me to be the person whose consideration therein
	embes	, 20 <b>17</b>
		3 . 3
Witness Signature:	Printed Name: I	ivona Kingston
<u></u>		
NAME OF SECOND INVENTOR:		
Given Name		
(first and middle (if anyl): Matthew	Family Name or Suma	me; Hoiko
and the set of the same of the same	property.	
Inventor's signature	<b>.</b>	Date <b>OCC 06 2017</b>
Residence Address: 375 King Street West, Apartment 467, Toronto, ON	MSV 1K1 CA	Citizenship: CANADIAN
Mailing Address: 375 King Street West, Apartment 407, Toronta, ON M	15V 1K1 CA	
NOTARIZATION		
BEFORE ME, the undersigned authority, on this day personally appeared Ma	atthew Holko, known to r	ne to be the person whose
name is subscribed above, and acknowledged to me that he/she executed the	same for the purposes and	consideration therein
expressed. Given under my hand e, this & day of Deek	mbte	, 20] ਤੋਂ
Witness	Witness	a. a. wa
Witness Signature Laker	Printed Name: 八角島	nmi gogna
NAME OF THIRD INVENTOR:	`}````````````````````````````````````	
Given Name		
(first and middle [if any]): Robert	Family Name or Surna	me: Kedmond
Inventor's signature		Date
		v
Residence Address:53 Larstone Avenue, Etobicoke, ON MSZ 2N7 CA		Citizenship:
Mailing Address: 53 Larstone Avenue, Etobicoke, ON M8Z 2N7 CA		
NOTARIZATION	خان تونون ت	
BEFORE ME, the undersigned authority, on this day personally appeared Robert Redmond, known to me to be the person whose		
name is subscribed above, and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed. Given under my hand, this day of , 20		
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Witness	Witness	
Signature:	Printed Name:	
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Docket No.: BHC159004 PCT-

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Whereas, Bayer HealthCare LLC a corporation organized and existing under the laws of the State of Delaware and having a place of business at 100 Bayer Boulevard, Whippany, NJ 07981, (assignee), desires to acquire the entire right, fitle, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors, legal representatives, and assigns, the entire right, title and interest in the invention and the application for the United States of America, including all direct and indirect divisions, continuations, and continuations-in-part thereof, and all original, extended, reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be granted thereon, including rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee, its successors, legal representatives, or assigns. I/We further represent and warrant that I/We have the full right to convey the interest assigned by this assignment, and that I/We have not granted any rights inconsistent with the rights granted herein. I/We further acknowledge an obligation of assignment of this invention to assignee at the time the invention was made and we further irrevocably designate and appoint assignee and its counsel as my/our attorney-in-fact and agent to act for and on my/our behalf to execute and file any document and to do all other lawfully permitted acts to further the purposes of this Agreement with the same legal force and effect as if executed by assignor himself/herself. I/We acknowledge that assignee is the real party in interest to any and all patent applications described in connection with this Agreement, and to any and all patent rights gran

As the below named inventor I hereby declare that:

Assignment with Declaration is directed to:		The attached application, or
	×	United States Application or PCT International Application Number 15/553,317 filed on August 24, 2017 (Confirmation No.6399).

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In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participation.

NAME OF FIRST OR SOLE INVENTOR:		*********
Given Name		
(first and middle [if any]): Dzmitry	Family Name or Sumame: Liushtyk	
Inventor's signature	Date	
Residence Address: 64 Bloomgate Crescent, Richmond Hill, ON L	AE 4E2 CA Citizenship:	
Mailing Address: 64 Bloomgate Crescent, Richmond Hill, ON L48 NOTARIZATION	E 4E2 CA	~~~~
BEFORE ME, the undersigned authority, on this day personally appear name is subscribed above, and acknowledged to me that he/she execute expressed. Given under my hand, this day of		
Witness	Witness	
Signature:	Printed Name:	
NAME OF SECOND INVENTOR:		***************************************
Given Name		
(first and middle [if any]): Matthew	Family Name or Sumame: Holko	
Inventor's signature	Date	
Residence Address: 375 King Street West, Apartment 407, Toronto	k, ON M5V 1K1 CA Citizenship:	
10 200 A A A A A A A A A A A A A A A A A	200 Marks 200 CO	
Mailing Address: 375 King Street West, Apartment 407, Toronto, NOTARIZATION	ON MISV TRI CA	
BEFORE ME, the undersigned authority, on this day personally appear name is subscribed above, and acknowledged to me that he/she execute	d the same for the purposes and consideration therein	
expressed. Given under my hand e, this day of	, 20	
Witness	Witness	
Signature	Printed Name:	
		~~~~
NAME OF THIRD INVENTOR:	}	**********
Given Name		
(first and middle [if any]): Robert	Family Name or Surname: Redmond	*******
Inventor's signature	Date 12017	
1035 Hudson Dr., Kungston, ON	KAMEKE CA	
Residence Address: 53.Laustone Avenue, Embicoke, ON MISZ 2N7		
Mailing Address: 53 Larstone Avenue, Elobicoke, ON M8Z 2N7 C	A Ar above	***************************************
NOTARIZATION	Appear to a second of the seco	
BEFORE ME, the undersigned authority, on this day personally appear name is subscribed above, and acknowledged to me that he/she execute expressed. Given under my hand, this thay of		
Witness	Witness	
Winness Signature:	Witness Printed Name: GNAEME MCKAT	

**PATENT REEL: 044517 FRAME: 0280** 

**RECORDED: 01/02/2018**