505016723 07/24/2018

PATENT ASSIGNMENT COVER SHEET

EPAS ID: PAT5063471 Electronic Version v1.1

Stylesheet Version v1.2

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JEREMY A. GREENBERGER	07/11/2018
ZACHARY GREENBERGER	06/26/2018
MATTHEW J. MARGOLIS	06/20/2018
CIARAN HANNIGAN	06/27/2018

RECEIVING PARTY DATA

Name:	INTERNATIONAL BUSINESS MACHINES CORPORATION
Street Address:	NEW ORCHARD ROAD
City:	ARMONK
State/Country:	NEW YORK
Postal Code:	10504

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16021875

CORRESPONDENCE DATA

Fax Number: (518)452-5579

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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Sandra.claros@hrfmlaw.com Email:

Correspondent Name: HESLIN ROTHENBERG FARLEY & MESITI P.C.

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ATTORNEY DOCKET NUMBER:	END820170205US01
NAME OF SUBMITTER:	GEORGE S. BLASIAK
SIGNATURE:	/George S. Blasiak/
DATE SIGNED:	07/24/2018
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 8 source=H1246100#page1.tif

> **PATENT** REEL: 046437 FRAME: 0691 505016723



PATENT REEL: 046437 FRAME: 0692 Document Description: Oath or declaration filed

PTO/Ala/02 (07-13)

Approved for use through 11/20/2020. OMB 0851-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention					
This stateme	nt is directed to:				
The att	sched application.				
OR					
United S	itates application or PCT international	application number	·····	filed on	······································
LEGAL NA	ME of inventor to whom this sub	ostitute statement appli	ies:		
	Name (first and middle (if any)) and Fi	amity Name or Surname)			
	A. GREENBERGER			00000000000000000000000000000000000000	
	except for a deceased or legally incepa	icitated inventor):	ţ	والمستعدد والمستعد والمستعدد والمستع	
_{city} San	Jose	_{State} CA	Cou	mv US	
	ss (except for a deceased or legally incapa	citated inventor):			
3003 Oli	n Avenue, Apartment 125				
_{city} San	Jose	State CA		_{zio} 95128	Country US
I believe the in the ap	above-named inventor or joint invento	or to be the original inventor	or a	n original joint inventor	of a claimed invention
The above-i	dentified application was made or auth	orized to be made by me.			
horoby ack	nowledge that any willful false stateme	ant made in this statement.	ie en	nichahla uadar 18 H.Š.	C 1001 by fine or
	ment of not more than five (5) years, o		ios him	Traditional disease to with	a. rsu, sy ma.u.
Relationsh	p to the inventor to whom this substitu	te statement applies:			
	gal Representative (for deceased or le	agally incapacitated invento	or onl	ly).	
A A	ssignee,				
Person to whom the inventor is under an obligation to assign.					
Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or					
	int inventor.				

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1,83. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1,11 and 1,14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time yeu require to complete this form analor suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Pesent and Tracement Office, U.S. Department of Commence, P.C. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Sox 1450, Alexandria, VA 22313-1450.

If you need assistance in complexing the form, cell 1-800-PTO-9199 and select option 2.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute s	tatement:		11 11 12 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Inventor is deceased,			
Inventor is under legal incapacity,			
Inventor cannot be found or reached after diffe	gent effort, or		
Inventor has refused to execute the oath or de	eclaration under 37 CFF	₹ 1.63.	
If there are joint inventors, please check the appropria	te box below:		
An application data sheet under 37 CFR 1.76 or is currently submitted.	(PTO/AIA/14 or equival	ent) naming the entire	e inventive entity has been
OR			***************************************
An application data sheet under 37 CFR 1.76 Statement Supplemental Sheet (PTO/AIA/11 information is attached. See 37 CFR 1.64(b).	or equivalent) naming the		
: ¥	VARNING:	· · · · · · · · · · · · · · · · · · ·	
Petitioner/applicant is cautioned to avoid submitting pers- contribute to identity theft. Personal information such as (other than a check or credit card authorization form PTG to support a petition or an application. If this type of per- petitioners/applicants should consider reducting such per USPTO. Petitioner/applicant is advised that the record of application (unless a non-publication request in complian patent. Furthermore, the record from an abandoned appreferenced in a published application or an issued patent PTO-2038 submitted for payment purposes are not retail	social security number 0-2038 submitted for pa sonal information is incli- resonal information from of a patent application is nee with 37 OFR 1.213() plication may also be av- ti (see 37 OFR 1.14). C	s, bank account numbly yment purposes) is n uded in documents so the documents befon a available to the publi a) is made in the appli ailable to the public if hecks and credit carc	pers, or credit card numbers ever required by the USPTO iomitted to the USPTO, es submitting them to the cafter publication of the ication) or issuance of a the application is
PERSON EXECUTING THIS SUBSTITUTE STATEME!	NT:		
Name: Timothy M. Farrell, Rec	g. No. 37,32	21	July 11, 2018 Date (Optional):
Signature: Till r. Finall			
APPLICANT NAME AND TITLE OF PERSON EXECU			
If the applicant is a juristic entily, list the applicant name International Business Mach		en	
Applicant Name:	mies corporation		
Title of Person Executing This Substitute Statement: Counsel The Substitute Statement: Counsel			
i the sigher. Whose bue is supplied above, is equiviled	to act on behalf of the	applicant.	Cont. 19
Residence of the signer (unless provided in an appl	scation data sneet, mi	C/AIA/14 of equivals	3194):
_{city} Alpine star		Country US	
Mailing Address of the signer (unless provided in a 357 North Main Street	n application data she	et, PTO/AIA/14 or e	quivalent)
State	JT	zp 84004	Country US
Note: Use an additional PTO/AIA/02 form for each inve	entor who is deceased, I	egally incapacitated,	cannot be found or reached

[Page 2 of 2]

REEL: 046437 FRAME: 0694

DECLARATION (37 C.F.R. § 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. § 1.76) AND ASSIGNMENT

Title of Invention: MAPPING MOBILE DEVICE INTERACTIONS AND LOCATION ZONES IN A VENUE FOR USE IN SENDING NOTIFICATIONS

As a below named and undersigned inventor, I hereby declare that:
This declaration is directed to the attached application, or (if following box is checked):
[] United States application or PCT international application numberfiled on
The above-identified application was made or 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, including the claims.
I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. § 1.56.

Whereas, I ("ASSIGNOR") have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application and further identified by the IBM Docket Number provided above in the header of this document;

Whereas, International Business Machines Corporation (herein referred to as the "ASSIGNEE"), a corporation of New York having a place of business at Armonk, New York, desires to acquire, and I desire to grant to the ASSIGNEE, my entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, I hereby sell or have sold, assign or have assigned, and otherwise transfer or have transferred to the ASSIGNEE, its successors, legal representatives, and assigns, my entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, I hereby authorize and request the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to the ASSIGNEE, its successors, legal representatives, and assigns, my entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by me had this Assignment not been made; and I agree to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in the ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.

{H1219782.1} Page 1 of 2

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to the ASSIGNEE and am unaware of any reason why I may not have the full and unencumbered right to sell, assign, and transfer my rights hereby sold, assigned, and transferred, and have not executed, and will not execute, any document or instrument in conflict herewith. I also hereby grant the ASSIGNEE, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of New York, and any disputes will be resolved in a New York state court or federal court sited in New York.

I hereby 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.

Signature:	Date:
(1) Legal Name of Inventor: Jeremy A. GREENBERGER	
Signature: 3	
(2) Legal Name of Inventor: Zachary GREENBERGER	
Signature:	Date:
(3) Legal Name of Inventor: Matthew J. MARGOLIS	
Signature:	Date:

{H1219782.1}Page 2 of 2

(4) Legal Name of Inventor: Ciaran HANNIGAN

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Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, I hereby sell or have sold, assign or have assigned, and otherwise transfer or have transferred to the ASSIGNEE, its successors, legal representatives, and assigns, my entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, I hereby authorize and request the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to the ASSIGNEE, its successors, legal representatives, and assigns, my entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by me had this Assignment not been made; and I agree to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in the ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.

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Signature:	Daix:
(1) Legal Name of Inventor: Jeremy A. GREENBERGER	
Signature:	Date:
(2) Legal Name of Inventor: Zachary GREENBERGER	
Signature: (3) Legal Name of Inventor: Matthew J. MARGOLIS	
Signature:	Date:

(RESERVED) Page 2 of 2

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Signature:	Date:
(1) Legal Name of Inventor: Jeremy A. GREENBERGER	
Signature:	Date:
(2) Legal Name of Inventor: Zachary GREENBERGER	
Signature:	Date:
(3) Legal Name of Inventor: Matthew J. MARGOLIS	
Signature:	Date: 6-27-2018
Digitatio.	

{H1219782.1}Page 2 of 2

(4) Legal Name of Inventor: Ciaran HANNIGAN

RECORDED: 07/24/2018