504583985 10/06/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4630697

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SUSAN VARGHESE	10/05/2017
WILLIAM AUGUST STAHLHUT	10/03/2017
MOHAMED A. GAHNOOG	10/04/2017
KATHERINE DINTENFASS	09/27/2017
MINH N. VUONG	10/03/2017
CAMERON DARNELL WADLEY	10/04/2017

RECEIVING PARTY DATA

Name:	BANK OF AMERICA CORPORATION
Street Address:	MAIL CODE NC 1-027-20-05
Internal Address:	214 N. TRYON ST.
City:	CHARLOTTE
State/Country:	NORTH CAROLINA
Postal Code:	28255

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15726976

CORRESPONDENCE DATA

Fax Number: (202)824-3001

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.

Phone: (312) 463-5000

Email: bwptopat@bannerwitcoff.com, lsunderland@bannerwitcoff.com

Correspondent Name: BANNER & WITCOFF, LTD.

Address Line 1: 1100 13TH ST. NW

Address Line 2: STE 1200

Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER:	007131.01922 PMR/LLS
NAME OF SUBMITTER:	PAUL M. RIVARD
SIGNATURE:	/Paul M. Rivard/
DATE SIGNED:	10/06/2017

504583985 PATENT REEL: 043806 FRAME: 0695

Total Attachments: 12

source=P8028 US Combined Declaration and Assignment as filed (2)#page1.tif source=P8028 US Combined Declaration and Assignment as filed (2)#page2.tif source=P8028 US Combined Declaration and Assignment as filed (2)#page3.tif source=P8028 US Combined Declaration and Assignment as filed (2)#page4.tif source=P8028 US Combined Declaration and Assignment as filed (2)#page5.tif source=P8028 US Combined Declaration and Assignment as filed (2)#page6.tif source=P8028 US Combined Declaration and Assignment as filed (2)#page7.tif source=P8028 US Combined Declaration and Assignment as filed (2)#page8.tif source=P8028 US Combined Declaration and Assignment as filed (2)#page9.tif source=P8028 US Combined Declaration and Assignment as filed (2)#page10.tif source=P8028 US Combined Declaration and Assignment as filed (2)#page11.tif source=P8028 US Combined Declaration and Assignment as filed (2)#page11.tif source=P8028 US Combined Declaration and Assignment as filed (2)#page12.tif

PATENT REEL: 043806 FRAME: 0696

P8028-US

Title of Invention	PREDICTIVE MODELING FOR EVENT DELIVERY BASED ON REAL-TIME DATA	
As the below	named inventor, I hereby declare that:	
This declarati	The attached application, or	
	United States application or PCT international application number filed on	
The above-ide	entified 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.	
	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or to fine more than five (5) years, or both.	
	ASSIGNMENT	
WHEREAS, I, Susan Varghese ("Assignor"), a citizen of the United States (Country), residing in Atlanta, GA (City, State/Province) have invented the above invention. If the following lines are blank, the above application was filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 for recordal of this assignment, I, an assignor below, hereby authorize the attorneys for Bank of America to insert the filing date and application number below after they become known and prior to filing the recordation.		
	U.S. Application No, filed	
WHEREAS, BANK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of Delaware, and having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto:		
NOW, THEREFORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I said Assignor, by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal representatives, the full and exclusive right, title and interest for the territory of the United States of America and all countries foreign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuation-in-parts and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all non-provisional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do everything reas		

P8028-US

WARNING:

parposes are not retained in the application me and therefore	are not publicly	available.
LEGAL NAME OF INVENTOR		
Inventor: Susan Varghese	Date:	10/5/17
Signature:/ Susan Varghese	<u>′</u>	

P8028-US

Title of Invention	PREDICTIVE MODELING FOR	EVENT DELIVERY BAS	ED ON REAL-TIME DATA
As the below	named inventor, I hereby declare that:		
This declaration is directed to:	The attached application, or		
	United States application or PCT filed on		mber
The above-ide	entified application was made or authorized t	o be made by me.	
I believe that	I am the original inventor or an original joint i	inventor of a claimed invent	ion in the application.
	owledge that any willful false statement made t of not more than five (5) years, or both.	e in this declaration is punis	hable under 18 U.S.C. 1001 by fine or
	ASS	IGNMENT	
WHEREAS, I, William August Stahlhut ("Assignor"), a citizen of the United States (Country), residing in The Colony, TX (City, State/Province) have invented the above invention. If the following lines are blank, the above application was filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 for recordal of this assignment, I, an assignor below, hereby authorize the attorneys for Bank of America to insert the filing date and application number below after they become known and prior to filing the recordation.			
	U.S. Application No	, filed	
WHEREAS, BANK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of Delaware, and having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto:			
NOW, THEREFORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I said Assignor, by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal representatives, the full and exclusive right, title and interest for the territory of the United States of America and all countries foreign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuation-in-parts and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all non-provisional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do			

P8028-US

WARNING:

purposes are not retained in the application line and therefore ar	c not public	ny available.
LEGAL NAME OF INVENTOR		
Inventor: William August Stahlhut	Date:	10/3/2017
Signature: Milled 19		

Title of Invention	PREDICTIVE MODELING FOR EVENT DELIVERY BASED ON REAL-TIME DATA	
As the below	named inventor, I hereby declare that:	
This declaration is directed to:	[X] The attached application, of	
	United States application or PCT international application number	
The above-ide	entified application was made or authorized to be made by me.	
I believe that	am the original inventor or an original joint inventor of a claimed invention in the application.	
I hereby ackno imprisonment	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or of not more than five (5) years, or both.	
	ASSIGNMENT	
WHEREAS, I, Mohamed A. Gahnoog ("Assignor"), a citizen of the United States (Country), residing in Chanlotte, It the following lines are blank, the above application was filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 for recordal of this assignment, I, an assignor below, hereby authorize the attorneys for Bank of America to insert the filing date and application number below after they become known and prior to filing the recordation.		
	U.S. Application No, filed	
WHEREAS, BANK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of Delaware, and having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto:		
NOW, THEREFORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I said Assignor, by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal representatives, the full and exclusive right, title and interest for the territory of the United States of America and all countries foreign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuation-in-parts and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all non-provisional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do		

P8028-US

WARNING:

an issued patent (see 37 CFR 1.14). Checks and credit of purposes are not retained in the application file and the	ard authorization forms PTO-2038 submitted for payment erefore are not publicly available.
LEGAL NAME OF INVENTOR	
Inventor: Mohamed A. Gahnoog	Date: 10/04/2017
Signature:	

P8028-US

Title of Invention	PREDICTIVE MODELING FOR EVENT DELIVERY BASED ON REAL-TIME DATA	
As the below	named inventor, I hereby declare that:	
This declaration	The attached application, or	
	United States application or PCT international application number filed on	
The above-ide	entified 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.	
	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or to fine or to fine than five (5) years, or both.	
	ASSIGNMENT	
WHEREAS, I, Katherine Dintenfass ("Assignor"), a citizen of the United States (Country), residing in Lincoln, RI (City, State/Province) have invented the above invention. If the following lines are blank, the above application was filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 for recordal of this assignment, I, an assignor below, hereby authorize the attorneys for Bank of America to insert the filing date and application number below after they become known and prior to filing the recordation.		
	U.S. Application No, filed	
WHEREAS, BANK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of Delaware, and having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto:		
NOW, THEREFORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I said Assignor, by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal representatives, the full and exclusive right, title and interest for the territory of the United States of America and all countries foreign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuation-in-parts and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all non-provisional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do		

WARNING:

purposes are not retained in the application file and therefore al	re not publicly	available.	
LEGAL NAME OF INVENTOR			
Inventor: Katherine Dintenfass	Date:	9-27-17	
Signature: / Alley During			

Title of Invention	PREDICTIVE MODELING FOR EVENT DELIVERY BASED ON REAL-TIME DATA		
As the below	named inventor, I hereby declare that:		
This declaration The attached application, or is directed to:			
	United States application or PCT international application number		
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 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.			
	ASSIGNMENT		
WHEREAS, I, Minh V. Vuong ("Assignor"), a citizen of the United States (Country), residing in (City, State/Province) have invented the above invention. If the following lines are blank, the above application was filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 for recordal of this assignment, I, an assignor below, hereby authorize the attorneys for Bank of America to insert the filing date and application number below after they become known and prior to filing the recordation.			
	U.S. Application No, filed		
WHEREAS, BANK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of Delaware, and having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto:			
NOW, THEREFORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I said Assignor, by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal representatives, the full and exclusive right, title and interest for the territory of the United States of America and all countries foreign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuation-in-parts and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all non-provisional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do			

WARNING:

pulposes are not retained in the application me and therefore are not publicly available.				
LEGAL NAME OF INVENTOR				
Inventor: Minh V. Vuong	Date: 10 3 17			
Signature:				

P8028-US

Title of Invention	PREDICTIVE MODELING FOR	R EVENT DELIVERY BAS	ED ON REAL-TIME DATA	
As the below	named inventor, I hereby declare that:			
This declaration				
	United States application or PCT filed on		mber	
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 invent	ion in the application.	
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.				
	ASS	IGNMENT		
WHEREAS, I, Cameron Darnell Wadley ("Assignor"), a citizen of the United States (Country), residing in <u>Waxhaw, NC</u> (City, State/Province) have invented the above invention. If the following lines are blank, the above application was filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 for recordal of this assignment, I, an assignor below, hereby authorize the attorneys for Bank of America to insert the filing date and application number below after they become known and prior to filing the recordation.				
	U.S. Application No.	, filed	·	
WHEREAS, BANK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of Delaware, and having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto:				
payment for t said Assignor, representative countries for a countries in it entitled under Letters Patent in-parts and a confidential in request the Countries or interest. I rep without furth nominees, an provisional, deproceedings,	FORE, TO WHOM IT MAY CONCERN, be it knot the making of inventions, or employee benefit, by these presents do sell, assign and transferes, the full and exclusive right, title and interesting the sets own name and to claim any priority rights for international conventions, treaties, or other transfers therefor, and all non-provisionals, of extensions thereof, and in and to all copyright information, and compilations, necessary or uncommissioner of Patents, and any official who resulting therefrom to said Assignee, or its supersent and warrant that I have full right to again and all facts known to me regarding said invisional, reissue, reexamination, continuations sign all lawful papers, make all rightful oaths, assigns, and nominees, to obtain and enforce passing the said of th	its, the receipt and sufficience or unto said Assignee, its succest for the territory of the Unit space, (including the right for such foreign applications rwise), in and to said inventicularities, trademarks with their assues duty it is to issue patents successors and assigns, as assure to, execute, and deliver nee, communicate to said Asyentions whenever requested and generally do everything and generally do everything	cy of which is hereby acknowledged, I cessors, assigns and legal nited States of America and all to apply for Letters Patent in foreign to which such applications are ons and in and to all applications and inations, continuations, continuations, continuations, continuations, it is inventions. I hereby authorize and to issue all Letters Patent on said signee of the entire right, title and this assignment. I agree that I will essignee, or its successors, assigns, or ed, and that I will execute all non-applications, testify in any legal greasonable for said Assignee, its	

P8028-US

WARNING:

purposes are not retained in the application file and the	refore are not publicly available.
LEGAL NAME OF INVENTOR	
Inventor: <u>Cameron Darnell Wadley</u>	Date:
Signature: / Callo My	