#### 505710225 10/07/2019

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5757035

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
AKIVA KATES	12/01/2016
JOSEPH CASTINADO	12/02/2016
ROB ODDY	12/02/2016
BRANDON CASTAGNA	12/07/2016

#### **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:	16594298

#### **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.

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ATTORNEY DOCKET NUMBER:	007131.02205\US	
NAME OF SUBMITTER:	RAJIT KAPUR	
SIGNATURE:	/Rajit Kapur/	
DATE SIGNED:	10/07/2019	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

**PATENT** REEL: 050640 FRAME: 0987 505710225

### **Total Attachments: 8**

source=Combined Assignment and Declaration as recorded#page1.tif source=Combined Assignment and Declaration as recorded#page2.tif source=Combined Assignment and Declaration as recorded#page3.tif source=Combined Assignment and Declaration as recorded#page4.tif source=Combined Assignment and Declaration as recorded#page5.tif source=Combined Assignment and Declaration as recorded#page6.tif source=Combined Assignment and Declaration as recorded#page7.tif source=Combined Assignment and Declaration as recorded#page8.tif

PATENT REEL: 050640 FRAME: 0988

## COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of	MULTICOMPUTER PROCESSING OF CLIENT DEVICE REQUEST DATA
Invention	USING CENTRALIZED EVENT ORCHESTRATOR AND DYNAMIC ENDPOINT ENGINE
As the below	named inventor, I hereby declare that:
This declarati	(2X) 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	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 tof not more than five (5) years, or both.
**************************************	ASSIGNMENT
Carolina (City filed on even hereby autho	Akiva D. Kates ("Assignor"), a citizen of The United States of America (Country), residing in Charlotte, North . State/Province) have invented the above invention. If the following lines are blank, the above application was date herewith, otherwise, to comply with 37 C.F.R. §3.21 for recordal of this assignment, I, an assignor below, rize the attorneys for Bank of America to insert the filing date and application number below after they and prior to filing the recordation.
	U.S. Application No. 16/594,298 , filed October 7, 2019
Delaware, and title and inter	NK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of I having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, est in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the of America, and in any and all countries foreign thereto:
payment for t said Assignor, representative countries fore countries in it entitled unde Letters Patent in-parts and e confidential in request the Co inventions or interest. I rep- without furth- nominees, an provisional, di proceedings, s	FORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or the making of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal es, the full and exclusive right, title and interest for the territory of the United States of America and all eight thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign sown name and to claim any priority rights for such foreign applications to which such applications are rinternational conventions, treaties, or otherwise), in and to said inventions and in and to all applications and granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuation-extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, information, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and promissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said presulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and resent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will execute all non-visional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal sign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its signs, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR	
Inventor: Akiva D. Kates Date:	13/1/2016

## COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	MULTICOMPUTER PROCESSING OF CLIENT DEVICE REQUEST DATA USING CENTRALIZED EVENT ORCHESTRATOR AND DYNAMIC ENDPOINT ENGINE	
As the below	named inventor, I hereby declare that:	
This declarati	The attached application, or	
	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	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 t of not more than five (5) years, or both.	
	ASSIGNMENT	
Northglenn, Capplication wassignor below	oseph Benjamin Castinado ("Assignor"), a citizen of <u>The United States of America</u> (Country), residing in Colorado (City, State/Province) have invented the above invention. If the following lines are blank, the above as filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 for recordal of this assignment, I, an w, hereby authorize the attorneys for Bank of America to insert the filing date and application number below come known and prior to filing the recordation.	
	U.S. Application No. <u>16/594,298</u> , filed <u>October 7, 2019</u> .	
Delaware, and title and inter	NK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of d having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, est in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the of America, and in any and all countries foreign thereto:	
payment for the said Assignor, representative countries for a countries in it entitled under Letters Patentin-parts and a confidential in request the Countriest. I repuis without furth nominees, an provisional, differential proceedings,	FORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or the making of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal es, the full and exclusive right, title and interest for the territory of the United States of America and all eign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign is own name and to claim any priority rights for such foreign applications to which such applications are reinternational conventions, treaties, or otherwise), in and to said inventions and in and to all applications and to granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, information, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and dommissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and resent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will er consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or y and all facts known to me regarding said inventions whenever requested, and that I will execute all non-ivisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal sign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its signs, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.	

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Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

	' '	
LEGAL NAME OF INVENTOR		
Inventor: Joseph Benjamin Castinado	Date:12/2/20	2016
Signature: John B Casting		

## COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	MULTICOMPUTER PROCESSING OF CLIENT DEVICE REQUEST DATA USING CENTRALIZED EVENT ORCHESTRATOR AND DYNAMIC ENDPOINT ENGINE
As the below	named inventor, I hereby declare that:
This declaration is directed to:	/\  The attached application, or
	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	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 tof not more than five (5) years, or both.
	ASSIGNMENT
have invented otherwise, to	
	U.S. Application No. <u>16/594,298</u> , filed <u>October 7, 2019</u> .
Delaware, and title and inter	NNK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of d having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, est in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the of America, and in any and all countries foreign thereto:
payment for the said Assignor, representative countries for ecountries in it entitled under Letters Patentin-parts and econfidential in request the Conventions or interest. I repwithout furth nominees, an provisional, diproceedings,	FORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or the making of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal es, the full and exclusive right, title and interest for the territory of the United States of America and all eign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign so own name and to claim any priority rights for such foreign applications to which such applications are rinternational conventions, treaties, or otherwise), in and to said inventions and in and to all applications and transfer agranted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, information, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and dommissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and resent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will er consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or y and all facts known to me regarding said inventions whenever requested, and that I will execute all non-ivisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal sign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its signs, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.

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LEGAL NAME OF INVENTOR

Inventor: Rob Oddy

eran a kanaga

2. Dec. 2016

# COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

MULTICOMPUTER PROCESSING OF CLIENT DEVICE REQUEST DATA
Invention USING CENTRALIZED EVENT ORCHESTRATOR AND DYNAMIC ENDPOINT
ENGINE
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 filed 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 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, <u>Brandon Castagna</u> ("Assignor"), a citizen of <u>The United States of America</u> (Country), residing in <u>Mount Holly, North Carolina</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. 16/594,298 , filed October 7, 2019
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

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Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Brandon Castag

Signature:

Date: 2016-12-07

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**RECORDED: 10/07/2019** 

**PATENT** REEL: 050640 FRAME: 0996