506353056 11/13/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6399809

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ZHI CUI	08/28/2020
NIGEL BRADLEY	07/13/2020
ARI CRAINE	07/15/2020
ROBERT KOCH	09/16/2020

RECEIVING PARTY DATA

Name:	AT&T INTELLECTUAL PROPERTY I, L.P.	
Street Address:	754 PEACHTREE ST. NE	
Internal Address:	SUITE 7C	
City:	ATLANTA	
State/Country:	GEORGIA	
Postal Code:	30308	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16933206

CORRESPONDENCE DATA

Fax Number: (216)696-8731

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: 2166968730

Email: epas@thepatentattorneys.com

Correspondent Name: AT&T LEGAL DEPARTMENT - AT&W

Address Line 1: ONE AT&T WAY Address Line 2: ROOM 2A 212

Address Line 4: BEDMINSTER, NEW JERSEY 07921

Total Attachments O		
DATE SIGNED:	11/13/2020	
SIGNATURE:	/Thomas E. Watson/	
NAME OF SUBMITTER:	THOMAS E. WATSON	
ATTORNEY DOCKET NUMBER:	2020-0041/ATTWP1379US	

Total Attachments: 8

PATENT REEL: 054357 FRAME: 0223

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PATENT REEL: 054357 FRAME: 0224

WHEREAS I/we, **Zhi Cui** residing at **770 Links View Drive**, **Sugar Hill**, **GA 30518**, hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "**FACILITATION OF PREDICTIVE SIMULATION OF PLANNED ENVIRONMENT**,", having AT&T Docket No. **2020-0041**, the patent application filed in the United States Patent & Trademark Office on <u>July 20, 2020</u> and assigned U.S. Patent Application Serial no. <u>16/933,206</u> (I/we hereby authorize and request Assignee (defined below) or any agent or attorney of Assignee to insert the filing date and application number above when known, and any further identification information, if required); and

WHEREAS, AT&T INTELLECTUAL PROPERTY I, L.P., a Partnership organized and existing under the laws of Nevada and having an address at 754 Peachtree St. NE, Suite 7C, Atlanta, GA 30308 (hereinafter referred to as Assignee), desires to acquire the entire right, title and interest for the United States of America and elsewhere throughout the world in and to said invention and the patent application identified above, including any and all divisions and continuations thereof and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereto;

NOW THEREFORE, in accordance with any employment-related or contracting agreement and in consideration of the sum of Ten Dollars (\$10.00) and/or other good and valuable consideration, including, without limitation, any patent awards received for such invention, employment-related benefits, and/or continued employment, the receipt and sufficiency of which from Assignee is hereby acknowledged and so agreed, I/we, as Assignor, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my entire right, title, and interest in and to this invention and this non-provisional application, and all divisions, substitutions, and continuations thereof; and all Letters Patent of the United States which may be granted thereon, and all reexaminations and reissues thereof; and all rights to claim priority on the basis of the above provisional application (if any), as well as all rights to claim priority on the basis of this application; and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, including certificates of inventions, utility models, industrial design protection, design patent protection, and other governmental grants or issuances; and all extensions, renewals, prolongations, and reissues thereof; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term and terms for all such patents;

AND, I/we HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/we HEREBY covenant that I/we have the full right to convey the interest assigned by this Assignment, and I/we have not executed and will not execute any assignment, sale, license, agreement, or encumbrance in conflict with this Assignment;

AND, I/we HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I/we will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention; assist the Assignee in the prosecution of the patent application identified above; assist in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; testify in any interference, litigation, or other legal proceeding; sign all lawful papers when called upon to do so; execute and deliver

any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns; execute all divisional, continuation, and reissue applications; make all rightful oaths and generally do everything possible to aid Assignee, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee; and hereby instruct, and further covenant and agree to bind our heirs, legal representatives, and assigns, to do same, without compensation, but at the expense of Assignee or its representatives.

AND, I/we HEREBY consent that a copy of this Assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of AT&T INTELLECTUAL PROPERTY I, L.P. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

This Assignment may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original, and such counterparts together shall constitute one and the same instrument. A facsimile copy of this Assignment, or any form of an electronic copy of this Assignment, including the signature pages hereto, shall be deemed to be an original.

IN TESTIMONY WHEREOF, I/we have hereunto set my hand this 28^{10} day of Anywork, 202.0

Zhi Cui

Country

Notary Public My Commi

MARIA M BONILLA Notary Public - State of Georgia Dekalb County My Commission Expires Sep 30, 2022

WHEREAS I/we, Nigel Bradley residing at 464 Greyfield Drive, Canton, GA 30115, hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "FACILITATION OF PREDICTIVE SIMULATION OF PLANNED ENVIRONMENT," having AT&T Docket No. Docket No. 2020-0041, the patent application filed in the United States Patent & Trademark Office on July 20, 2020. and assigned U.S. Patent Application Serial no.

16/933,206___(I/we hereby authorize and request Assignee (defined below) or any agent or attorney of Assignee to insert the filing date and application number above when known, and any further identification information, if required); and

WHEREAS, AT&T INTELLECTUAL PROPERTY I, L.P., a Partnership organized and existing under the laws of Nevada and having an address at 754 Peachtree St. NE, Suite 7C, Atlanta, GA 30308 (hereinafter referred to as Assignee), desires to acquire the entire right, title and interest for the United States of America and elsewhere throughout the world in and to said invention and the patent application identified above, including any and all divisions and continuations thereof and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereto;

NOW THEREFORE, in accordance with any employment-related or contracting agreement and in consideration of the sum of Ten Dollars (\$10.00) and/or other good and valuable consideration, including, without limitation, any patent awards received for such invention, employment-related benefits, and/or continued employment, the receipt and sufficiency of which from Assignee is hereby acknowledged and so agreed, I/we, as Assignor, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my entire right, title, and interest in and to this invention and this non-provisional application, and all divisions, substitutions, and continuations thereof; and all Letters Patent of the United States which may be granted thereon, and all reexaminations and reissues thereof; and all rights to claim priority on the basis of the above provisional application (if any), as well as all rights to claim priority on the basis of this application; and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, including certificates of inventions, utility models, industrial design protection, design patent protection, and other governmental grants or issuances; and all extensions, renewals, prolongations, and reissues thereof; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term and terms for all such patents;

AND, I/we HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/we HEREBY covenant that I/we have the full right to convey the interest assigned by this Assignment, and I/we have not executed and will not execute any assignment, sale, license, agreement, or encumbrance in conflict with this Assignment;

AND, I/we HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I/we will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention; assist the Assignee in the prosecution of the patent application identified above; assist in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; testify in any interference,

Page 1 of 2

litigation, or other legal proceeding; sign all lawful papers when called upon to do so; execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns; execute all divisional, continuation, and reissue applications; make all rightful oaths and generally do everything possible to aid Assignee, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee; and hereby instruct, and further covenant and agree to bind our heirs, legal representatives, and assigns, to do same, without compensation, but at the expense of Assignee or its representatives.

AND, I/we HEREBY consent that a copy of this Assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of AT&T INTELLECTUAL PROPERTY I, L.P. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

This Assignment may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original, and such counterparts together shall constitute one and the same instrument. A facsimile copy of this Assignment, or any form of an electronic copy of this Assignment, including the signature pages hereto, shall be deemed to be an original.

IN TESTIMONY WHEREOF, I/we have hereunto set my hand this 3 day of 30 lw
202
nie burn
Nigel Bradley
State of Georgia
County of Futton
On this 13 day of 5014, 2020, before me a Notary Public in and for the above County and State, personally appeared Nago 1 and and knowledged the execution of the foregoing assignment as his/her free act and deed for the purpose herein set forth.
2.56.60
Notary Public My Commission Expires: JUI 24th 2023
VINITA RAD Notary Public - State of Georgia Fulton County And Commission Expires Jul 24, 2023

ζ,

WHEREAS I/we. Ari Craine residing at 50% Norseman Circle, Marietta GA, 30068, hereafter referred to as Assignor, and fisted as an inventor on a patent application entitled "FACILITATION OF PREDICTIVE SIMULATION OF PLANNED ENVIRONMENT," having AT&T Docket No. 2920-0041, the patent application filed in the United States Patent & Trademark Office on July 20, 2020 and assigned U.S. Patent Application Scrial no. 16/933,206 (I/we hereby authorize and request Assignee (defined below) or any agent or attorney of Assignee to insert the filing date and application number above when known, and any further identification information, if required); and

WHEREAS, AT&T INTELLECTUAL PROPERTY I, L.P., a Partnership organized and existing under the laws of Nevada and having an address at 754 Peachtree St. NE, Suite 7C, Adanta, GA 30308 (hereinafter referred to as Assignce), desires to acquire the entire right, title and interest for the United States of America and elsewhere throughout the world in and to said invention and the patent application identified above, including any and all divisions and continuations thereof and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereto;

NOW THEREFORE, in accordance with any employment-related or contracting agreement and in consideration of the sum of Ten Dollars (\$10.00) and/or other good and valuable consideration. including, without limitation, any patent awards received for such invention, employment-related benefits, and/or continued employment, the receipt and sufficiency of which from Assignee is hereby acknowledged and so agreed, I/we, as Assignor, have sold, assigned, transferred, and set over, and do bereby self, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my entire right, title, and interest in and to this invention and this non-provisional application, and all divisions. substitutions, and continuations thereof; and all Letters Patent of the United States which may be enumed thereon, and all reexaminations and reissues thereof; and all rights to claim priority on the basis of the above provisional application (if any), as well as all rights to claim priority on the basis of this application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country. including certificates of inventions, utility models, industrial design protection, design patent protection, and other governmental grants or issuances; and all extensions, renewals, protongations, and reissues. thereof, to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term and terms for all such patents.

AND, I/we HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment:

AND, I've HEREBY coverant that I've have the full right to convey the interest assigned by this Assignment, and I've have not executed and will not execute any assignment, sale, license, agreement, or encumbrance in conflict with this Assignment,

AND, I/we HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I/we will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention; assist the Assignee in the prosecution of the patent application identified above; assist in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; testify in any interference.

Page 1 of 2

inigation, or other legal proceeding, sign all lawful papers when called upon to do so; execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns; execute all divisional, continuation, and reissue applications; make all rightful oaths and generally do everything possible to aid Assignee, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, and hereby instruct, and further covenant and agree to bind our heirs, legal representatives, and assigns, to do same, without compensation, but at the expense of Assignee or its representatives.

AND, I/we HEREBY consent that a copy of this Assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of AT&T INTELLECTUAL PROPERTY I, L.P. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

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A construction in the construction of bridges restored great the received at the St. (M.S.119).
IN TESTIMONY WHEREOF, I/we have hereunto set my hand this $\frac{157}{100}$ day of $\frac{2420}{1000}$
20 <u>/</u> C
See Channe
State of <u>Clorgla</u>
County of CUblo
On this $\frac{577}{4}$ asy of $\frac{7 \nu / \nu_{\parallel}}{\sqrt{2500}}$, 20^{22} , before me a Notary Public in and for the above County and State, personally appeared $\frac{72500}{4}$, and acknowledged the execution of the foregoing assignment as his/her free act and deed for the purpose herein set forth.
Notary Public My Commission Expires: 7/4/2023
Notary Public My Commission Expires: 7/4/2623
301211864 //V/

Page 2 of 2

WHEREAS I/we, Robert Koch residing at 6085 Courtside Drive, Peachtree Corners, GA 30092, hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "FACILITATION OF PREDICTIVE SIMULATION OF PLANNED ENVIRONMENT," having AT&T Docket No. 2020-0041, the patent application filed in the United States Patent & Trademark Office on July 20, 2020 and assigned U.S. Patent Application Serial no. 16/933,206 (I/we hereby authorize and request Assignee (defined below) or any agent or attorney of Assignee to insert the filing date and application number above when known, and any further identification information, if required); and

WHEREAS, AT&T INTELLECTUAL PROPERTY I, L.P., a Partnership organized and existing under the laws of Nevada and having an address at 754 Peachtree St. NE, Suite 7C, Atlanta, GA 30308 (hereinafter referred to as Assignee), desires to acquire the entire right, title and interest for the United States of America and elsewhere throughout the world in and to said invention and the patent application identified above, including any and all divisions and continuations thereof and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereto;

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AND, I/we HEREBY covenant that I/we have the full right to convey the interest assigned by this Assignment, and I/we have not executed and will not execute any assignment, sale, license, agreement, or encumbrance in conflict with this Assignment;

AND, I/we HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I/we will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention; assist the Assignee in the prosecution of the patent application identified above; assist in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; testify in any interference,

litigation, or other legal proceeding; sign all lawful papers when called upon to do so; execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns; execute all divisional, continuation, and reissue applications; make all rightful oaths and generally do everything possible to aid Assignee, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee; and hereby instruct, and further covenant and agree to bind our heirs, legal representatives, and assigns, to do same, without compensation, but at the expense of Assignee or its representatives.

AND, I/we HEREBY consent that a copy of this Assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of AT&T INTELLECTUAL PROPERTY I, L.P. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

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IN TESTIMONY WHEREOF, I/we have hereunto set my hand this 6 day of

20 20

Robert Koch

County of

tember, 20 26 before me a Notary Public in and for the above County and State, personally appeared to and acknowledged the execution of the foregoing assignment as his/her free act and deed for the purpose herein set forth.

My Commission Expires: August 9, 2021

CHRISTINA HIPSLEY Notary Public - State of Georgia **Fulton County**

My Commission Expires Aug 9, 2021