

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5406996

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the EXECUTION DATE FOR YADONG MU previously recorded on Reel 048496 Frame 0726. Assignor(s) hereby confirms the ASSIGNMENT.
CONVEYING PARTY DATA	
Name	Execution Date
ERIC ZAVESKY	06/01/2016
LEE BEGEJA	06/01/2016
DAVID CRAWFORD GIBBON	06/01/2016
RAGHURAMAN GOPALAN	06/02/2016
ZHU LIU	06/01/2016
YADONG MU	10/25/2016
BERNARD S. RINGER	06/01/2016
BEHZAD SHAHRARAY	06/01/2016
RECEIVING PARTY DATA	
Name:	AT&T INTELLECTUAL PROPERTY I, L.P.
Street Address:	675 WEST PEACHTREE STREET
City:	ATLANTA
State/Country:	GEORGIA
Postal Code:	30308
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16292033
CORRESPONDENCE DATA	
Fax Number:	(732)542-2283
<i>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.</i>	
Phone:	7325422280
Email:	tnewman@trbkllaw.com
Correspondent Name:	AT&T LEGAL DEPARTMENT - TRBK
Address Line 1:	ONE AT&T WAY
Address Line 2:	ROOM 2A-212
Address Line 4:	BEDMINSTER, NEW JERSEY 07921
ATTORNEY DOCKET NUMBER:	2015-0875CON

NAME OF SUBMITTER:	TARA NEWMAN
SIGNATURE:	/T. Newman/
DATE SIGNED:	03/06/2019
Total Attachments: 18 source=CoverSheet (003)#page1.tif source=2015-0875CON_EASGN#page1.tif source=2015-0875CON_EASGN#page2.tif source=2015-0875CON_EASGN#page3.tif source=2015-0875CON_EASGN#page4.tif source=2015-0875CON_EASGN#page5.tif source=2015-0875CON_EASGN#page6.tif source=2015-0875CON_EASGN#page7.tif source=2015-0875CON_EASGN#page8.tif source=2015-0875CON_EASGN#page9.tif source=2015-0875CON_EASGN#page10.tif source=2015-0875CON_EASGN#page11.tif source=2015-0875CON_EASGN#page12.tif source=2015-0875CON_EASGN#page13.tif source=2015-0875CON_EASGN#page14.tif source=2015-0875CON_EASGN#page15.tif source=2015-0875CON_EASGN#page16.tif source=2015-0875CON_EASGN#page17.tif	

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5403673

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ERIC ZAVESKY	06/01/2016
LEE BEGEJA	06/01/2016
DAVID CRAWFORD GIBBON	06/01/2016
RAGHURAMAN GOPALAN	06/02/2016
ZHU LIU	06/01/2016
YADONG MU	10/23/2016
BERNARD S. RINGER	06/01/2016
BEHZAD SHAHRARAY	06/01/2016
RECEIVING PARTY DATA	
Name:	AT&T INTELLECTUAL PROPERTY I, L.P.
Street Address:	675 WEST PEACHTREE STREET
City:	ATLANTA
State/Country:	GEORGIA
Postal Code:	30308
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16292033
CORRESPONDENCE DATA	
Fax Number:	(732)542-2283
<i>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.</i>	
Phone:	7325422280
Email:	tnewman@trbkllaw.com
Correspondent Name:	AT&T LEGAL DEPARTMENT - TRBK
Address Line 1:	ONE AT&T WAY
Address Line 2:	ROOM 2A-212
Address Line 4:	BEDMINSTER, NEW JERSEY 07921
ATTORNEY DOCKET NUMBER:	2015-0875CON
NAME OF SUBMITTER:	TARA NEWMAN
SIGNATURE:	/T. Newman/

ASSIGNMENT

WHEREAS I, **Eric Zavesky** residing at **Austin, Texas** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled **"METHOD AND APPARATUS FOR PROVIDING A RECOMMENDED ACTION FOR A VENUE VIA A NETWORK"** having AT&T Docket No. **2015-0875**, the patent application to be filed in the United States Patent & Trademark Office; and

WHEREAS, **AT&T Intellectual Property I, L.P.**, a partnership organized and existing under the laws of **Nevada** and having an address at **675 West Peachtree Street, Atlanta, Georgia, 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, be it known that for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I, 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 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 HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any assignment, sale, license, agreement, or encumbrance in conflict with this Assignment;

AND, I HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I 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 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 have hereunto set my hand this 1 day of June, 2016.


Eric Zavesky

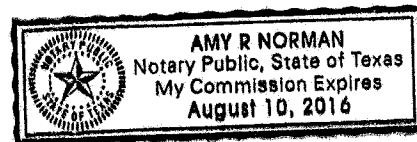
State of Texas)

County of Travis)

On this 1 day of June, 2016, before me a Notary Public in and for the above County and State, personally appeared **Eric Zavesky**, 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: 8-15-16



ASSIGNMENT

WHEREAS I, **Lee Begeja** residing at **Gillette, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled **"METHOD AND APPARATUS FOR PROVIDING A RECOMMENDED ACTION FOR A VENUE VIA A NETWORK"** having AT&T Docket No. **2015-0875**, the patent application to be filed in the United States Patent & Trademark Office; and

WHEREAS, **AT&T Intellectual Property I, L.P.**, a **partnership** organized and existing under the laws of **Nevada** and having an address at **675 West Peachtree Street, Atlanta, Georgia, 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, be it known that for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I, 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 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 HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any assignment, sale, license, agreement, or encumbrance in conflict with this Assignment;

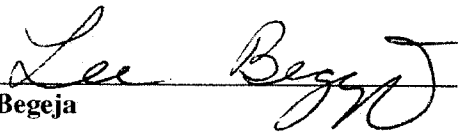
AND, I HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention; assist the Assignee in the prosecution of the patent 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 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.

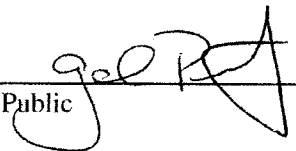
IN TESTIMONY WHEREOF, I have hereunto set my hand this 1st day of June, 2016.



Lee Begeja

State of NJ)
County of Somerset,

On this 1st day of June, 2016, before me a Notary Public in and for the above County and State, personally appeared **Lee Begeja**, 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: GAIL PETZ
NOTARY PUBLIC OF NEW JERSEY
ID # 2438146
My Commission Expires 9/8/2018

ASSIGNMENT

WHEREAS I, **David Crawford Gibbon** residing at **Lincroft, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "**METHOD AND APPARATUS FOR PROVIDING A RECOMMENDED ACTION FOR A VENUE VIA A NETWORK**" having AT&T Docket No. **2015-0875**, the patent application to be filed in the United States Patent & Trademark Office; and

WHEREAS, **AT&T Intellectual Property I, L.P.**, a partnership organized and existing under the laws of **Nevada** and having an address at **675 West Peachtree Street, Atlanta, Georgia, 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, be it known that for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I, 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 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 HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any assignment, sale, license, agreement, or encumbrance in conflict with this Assignment;

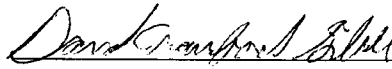
AND, I HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention; assist the Assignee in the prosecution of the patent 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 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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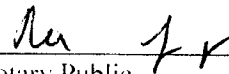
IN TESTIMONY WHEREOF, I have hereunto set my hand this 1st day of JUNE, 2016.


David Crawford Gibbon

State of New Jersey)

County of Monmouth)

On this 1st day of June, 2016, before me a Notary Public in and for the above County and State, personally appeared **David Crawford Gibbon**, 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: _____

REX A. LINGA JR.
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires September 19, 2019

ASSIGNMENT

WHEREAS I, **Raghuraman Gopalan** residing at **Union City, California** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled **"METHOD AND APPARATUS FOR PROVIDING A RECOMMENDED ACTION FOR A VENUE VIA A NETWORK"** having AT&T Docket No. **2015-0875**, the patent application to be filed in the United States Patent & Trademark Office; and

WHEREAS, **AT&T Intellectual Property I, L.P.**, a partnership organized and existing under the laws of **Nevada** and having an address at **675 West Peachtree Street, Atlanta, Georgia, 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, be it known that for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I, 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;

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

AND, I HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I 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 the 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.

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IN TESTIMONY WHEREOF I have hereunto set my hand this 2 day of June 2016.


Raghuraman Gopalan

State of C)
County of _____)

On this _____ day of _____, 2016, before me a Notary Public in and for the above County and State, personally appeared Raghuraman Gopalan, and acknowledged the execution of the foregoing assignment as his/her free act and deed for the purpose herein set forth.

Please see attached
Notary Public

My Commission Expires _____

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

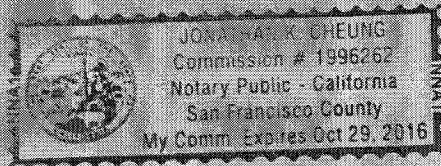
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
 County of San Francisco
 On June 2, 2016 before me, Jonathan Cheung, Notary Public
 Date Here Insert Name and Title of the Officer
 personally appeared Raghuraman Gopalan
 Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature

Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: Assignment (Docket No. 2015-0875)
 Document Date: 6/2/2016 Number of Pages: _____
 Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: Raghuraman Gopalan
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☒ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____
 Signer Is Representing: _____

Signer's Name: _____
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____
 Signer Is Representing: _____

ASSIGNMENT

WHEREAS I, **Zhu Liu** residing at **Marlboro, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled **"METHOD AND APPARATUS FOR PROVIDING A RECOMMENDED ACTION FOR A VENUE VIA A NETWORK"** having AT&T Docket No. **2015-0875**, the patent application to be filed in the United States Patent & Trademark Office; and

WHEREAS, **AT&T Intellectual Property I, L.P.**, a partnership organized and existing under the laws of **Nevada** and having an address at **675 West Peachtree Street, Atlanta, Georgia, 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, be it known that for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I, 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;

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AND, I HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I 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 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 have hereunto set my hand this 1 day of June, 2016.

Zhu Liu
Zhu Liu

State of New Jersey)

County of Mammoth)

On this 1st day of June, 2016, before me a Notary Public in and for the above County and State, personally appeared **Zhu Liu**, and acknowledged the execution of the foregoing assignment as his/her free act and deed for the purpose herein set forth.

Ree f r
Notary Public

My Commission Expires: _____

REX A. LINGA JR.
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires September 19, 2019

ASSIGNMENT

WHEREAS I, **Yadong Mu** residing at **Middletown, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled **"METHOD AND APPARATUS FOR PROVIDING A RECOMMENDED ACTION FOR A VENUE VIA A NETWORK"** having AT&T Docket No. **2015-0875**, U.S. Patent Application Serial No. 15/171,041, filed June 2, 2016, as filed in the United States Patent & Trademark Office; and

WHEREAS, **AT&T Intellectual Property I, L.P.**, a partnership organized and existing under the laws of **Nevada** and having an address at **675 West Peachtree Street, Atlanta, Georgia, 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, be it known that for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I, 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 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 HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any assignment, sale, license, agreement, or encumbrance in conflict with this Assignment;

AND, I HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I 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 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 have hereunto set my hand this 25 day of Oct, 2016.

Yadong Mu
Yadong Mu

State of New Jersey)
County of Monmouth)

Before me personally came Yadong Mu, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

SHUYING LI
Witness 1 (Print/Type)

Shuying Li
Witness 1 Signature/Date

QIJIE ZHAO
Witness 2 (Print/Type)

Qijie Zhao
Witness 2 Signature/Date

ASSIGNMENT

WHEREAS I, **Bernard S. Renger** residing at **New Providence, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "**METHOD AND APPARATUS FOR PROVIDING A RECOMMENDED ACTION FOR A VENUE VIA A NETWORK**" having AT&T Docket No. **2015-0875**, the patent application to be filed in the United States Patent & Trademark Office; and

WHEREAS, **AT&T Intellectual Property I, L.P.**, a **partnership** organized and existing under the laws of **Nevada** and having an address at **675 West Peachtree Street, Atlanta, Georgia, 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, be it known that for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I, 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 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 HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any assignment, sale, license, agreement, or encumbrance in conflict with this Assignment;


AND, I HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I 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.

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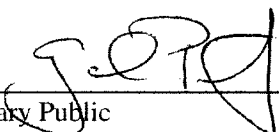
IN TESTIMONY WHEREOF, I have hereunto set my hand this 1st day of June, 2016.



Bernard S. Renger

State of NJ)
County of Somerset)

On this 1 day of June, 2016, before me a Notary Public in and for the above County and State, personally appeared **Bernard S. Renger**, 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: _____
GAIL PETZ
NOTARY PUBLIC OF NEW JERSEY
ID # 2438146
My Commission Expires 9/8/2018

ASSIGNMENT

WHEREAS I, **Behzad Shahraray** residing at **Holmdel, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled **"METHOD AND APPARATUS FOR PROVIDING A RECOMMENDED ACTION FOR A VENUE VIA A NETWORK"** having AT&T Docket No. **2015-0875**, the patent application to be filed in the United States Patent & Trademark Office; and

WHEREAS, **AT&T Intellectual Property I, L.P.**, a **partnership** organized and existing under the laws of **Nevada** and having an address at **675 West Peachtree Street, Atlanta, Georgia, 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, be it known that for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I, 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 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 HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any assignment, sale, license, agreement, or encumbrance in conflict with this Assignment;

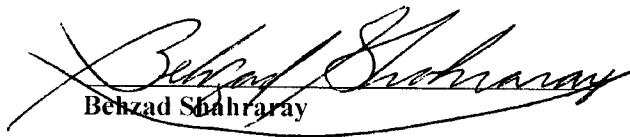
AND, I HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention; assist the Assignee in the prosecution of the patent 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 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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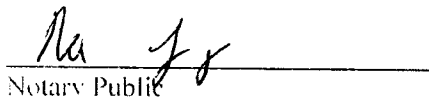
IN TESTIMONY WHEREOF, I have hereunto set my hand this 1st day of June, 2016.


Behzad Shahraray

State of New Jersey)

County of Monmouth)

On this 1st day of June, 2016, before me a Notary Public in and for the above County and State, personally appeared **Behzad Shahraray**, 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: _____

REX A. LINGA JR.
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires September 19, 2019