

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT5695011

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
CHING-FANG WANG	02/01/2016
SHAWN DUGAN	01/27/2016
WILLIAM WIESE	01/28/2016
ZHOU WU	02/01/2016
RECEIVING PARTY DATA	
Name:	AT&T MOBILITY II LLC
Street Address:	1025 LENOX PARK BOULEVARD
City:	ATLANTA
State/Country:	GEORGIA
Postal Code:	30319
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16556218
CORRESPONDENCE DATA	
Fax Number:	(216)696-8731
<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:	404-927-2780
Email:	epas@thepatentattorneys.com
Correspondent Name:	AT&T LEGAL DEPARTMENT - AT&W ATTN: PATE
Address Line 1:	ROOM 2A 212
Address Line 2:	ONE AT&T WAY
Address Line 4:	BEDMINSTER, NEW JERSEY 07921
ATTORNEY DOCKET NUMBER:	2015-0373CON/ATTWP767USA
NAME OF SUBMITTER:	THOMAS WATSON
SIGNATURE:	/Thomas Watson/
DATE SIGNED:	08/29/2019
Total Attachments: 9	
source=2015-0373CON_Assignment#page1.tif	
source=2015-0373CON_Assignment#page2.tif	

source=2015-0373CON_Assignment#page3.tif
source=2015-0373CON_Assignment#page4.tif
source=2015-0373CON_Assignment#page5.tif
source=2015-0373CON_Assignment#page6.tif
source=2015-0373CON_Assignment#page7.tif
source=2015-0373CON_Assignment#page8.tif
source=2015-0373CON_Assignment#page9.tif

ASSIGNMENT

WHEREAS I, **Ching-Fang Wang**, residing at 23210 SE 29th Ct, Sammamish, Washington, 98075, hereafter referred to as Assignor, am listed as an inventor on a patent application entitled **“QUANTUM INTRADAY ALERTING BASED ON RADIO ACCESS NETWORK OUTLIER ANALYSIS”** having AT&T Docket No. **2015-0373**, the patent application to be filed in the United States Patent & Trademark Office; and

WHEREAS, **AT&T Mobility II LLC**, a Corporation organized and existing under the laws of Delaware and having an address at 1025 Lenox Park Boulevard, Atlanta, Georgia 30319 (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 Mobility II LLC** 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 February, 2016.


CHING-FANG WANG

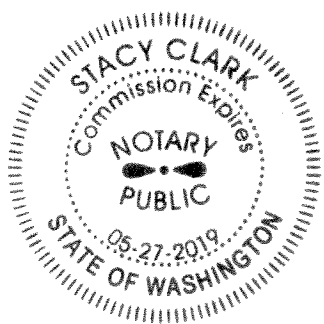
State of Washington)

County of King)

On this 1 day of February, 2016, before me a Notary Public in and for the above County and State, personally appeared **Ching-Fang Wang**, 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: May 27, 2019



ASSIGNMENT

WHEREAS I, **Shawn Dugan**, residing at 7113 Ohio River Blvd., Pittsburgh, Pennsylvania, 15202, hereafter referred to as Assignor, am listed as an inventor on a patent application entitled **"QUANTUM INTRADAY ALERTING BASED ON RADIO ACCESS NETWORK OUTLIER ANALYSIS"** having AT&T Docket No. **2015-0373**, the patent application to be filed in the United States Patent & Trademark Office; and

WHEREAS, **AT&T Mobility II LLC**, a Corporation organized and existing under the laws of Delaware and having an address at 1025 Lenox Park Boulevard, Atlanta, Georgia 30319 (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 Mobility II LLC** 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 27th day of January, 2016.


SHAWN DUGAN

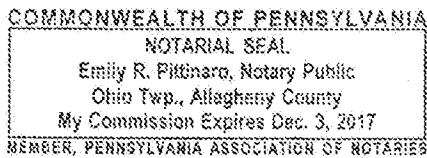
State of Pennsylvania)

County of Allegheny)

On this 27th day of January, 2016, before me a Notary Public in and for the above County and State, personally appeared **Shawn Dugan**, 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: 12/03/2017



ASSIGNMENT

WHEREAS I, **William Wiese**, residing at 6141 E Calle Pantano, Anaheim, California, 92807, hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "**QUANTUM INTRADAY ALERTING BASED ON RADIO ACCESS NETWORK OUTLIER ANALYSIS**" having AT&T Docket No. 2015-0373, the patent application to be filed in the United States Patent & Trademark Office; and

WHEREAS, **AT&T Mobility II LLC**, a Corporation organized and existing under the laws of Delaware and having an address at 1025 Lenox Park Boulevard, Atlanta, Georgia 30319 (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 Mobility II LLC 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 28 day of January, 2016.

William Wiese
WILLIAM WIESE

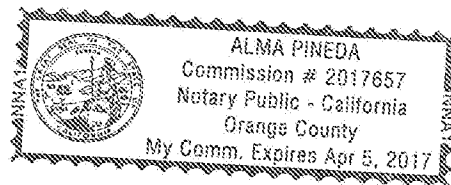
State of California)

County of Orange)

On this 28 day of January, 2016, before me Alma Pineda a Notary Public in and for the above County and State, personally appeared William Wiese, and acknowledged the execution of the foregoing assignment as his/hers free act and deed for the purpose herein set forth.

Alma Pineda
Notary Public

My Commission Expires: 4/5/2017



CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

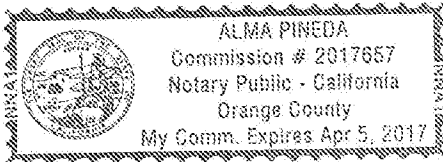
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of Orange)
On January 28, 2016 before me, Alma Pineda - Notary Public
Date Here Insert Name and Title of the Officer
personally appeared William Wiese
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

Alma Pineda

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-2015-0273 Document Date: 1/28/16
Number of Pages: Signer(s) Other Than Named Above:

Capacity(ies) Claimed by Signer(s)

Signer's Name:
Corporate Officer -- Title(s):
Partner -- General
Individual by in Fact
T
O
Sign

Signer's Name:
Corporate Officer -- Title(s):
Partner -- General
Individual by in Fact
T
O

ASSIGNMENT

WHEREAS I, **Zhou Wu**, residing at 14900 60th St SE, Bellevue, Washington, 98006, hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "**QUANTUM INTRADAY ALERTING BASED ON RADIO ACCESS NETWORK OUTLIER ANALYSIS**" having AT&T Docket No. **2015-0373**, the patent application to be filed in the United States Patent & Trademark Office; and

WHEREAS, **AT&T Mobility II LLC**, a Corporation organized and existing under the laws of Delaware and having an address at 1025 Lenox Park Boulevard, Atlanta, Georgia 30319 (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 Mobility II LLC** 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 February 2016.

Zhou Wu
ZHOU WU

State of Washington)

County of King)

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

Stacy Clark
Notary Public

My Commission Expires: May 27, 2019

