505791439 11/25/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT5838267 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GOANGSHIUAN SHAWN YING	03/06/2018
RONALD BROST	03/06/2018
EDWARD WALTER	03/10/2018

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:	16694723

CORRESPONDENCE DATA

Fax Number: (732)542-2283

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: 7325422280

Email: tnewman@trbklaw.com

AT&T LEGAL DEPARTMENT - TRBK **Correspondent Name:**

Address Line 1: PATENT DOCKETING

Address Line 2: ROOM 2A-212, ONE AT&T WAY Address Line 4: BEDMINSTER, NEW JERSEY 07921

ATTORNEY DOCKET NUMBER: 2016-1681CON **NAME OF SUBMITTER:** TARA NEWMAN /T. Newman/ SIGNATURE: **DATE SIGNED:** 11/25/2019

Total Attachments: 7

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ASSIGNMENT

WHEREAS I, Goangshiuan Shawn Ying residing at Oakland, California hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "REDUCING INTERFERENCE IN RADIO BROADCAST BANDS" having AT&T Docket No. 2016-1681, 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

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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	ve hereunto set my hand this 6th day of March
2018.	Jenst Gry
	Goangshiuan Shawn Ying 🥒
State of <u>California</u>	
County of $\frac{\sum_{an} Mateo}{}$	
County and State, personally appeared	, 2018, before me a Notary Public in and for the above d Goangshiuan Shawn Ying, and acknowledged the tas his/her free act and deed for the purpose herein set forth
Notary Public	My Commission Expires: 10/08/2021
	HAMED JIRSARAEI COMM. #2217313 NOTARY PUBLIC - CALIFORNIA E SAN MATEO COUNTY



ASSIGNMENT

WHEREAS I, Ronald Brost residing at San Ramon, California hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "REDUCING INTERFERENCE IN RADIO BROADCAST BANDS" having AT&T Docket No. 2016-1681, 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.

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IN TESTIMONY WHEREOF, I have hereunto set my hand this 💆 day of March. 2018.

State of <u>California</u>

County of <u>Contra Coata</u>)

ALEX CHARLES BROWN IR. Notary Public - California Contra Costa County Commission # 2191627 My Comm. Expires Apr 14, 2021

On this <u>a</u> day of <u>March</u>, 2018, before me a Notary Public in and for the above County and State, personally appeared Ronald Brost, 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: April 14, 2021

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT RPOSE ACKNOWLEDGMENT CIVIL CODE § 1189

A notary public or other officer completing this certificate document to which this certificate is attached, and not the	ate verifies only the identity of the individual who signed the ne truthfulness, accuracy, or validity of that document.
State of California)	
County of Contra Contra	
	Alex Charas Bounds Nobery Public.
Date nersonally anneared Ponale B	Here Insert Name and Title of the Officer
personally appeared	
	Name(s) of Signer(s)
subscribed to the within instrument and acknowle	evidence to be the person(s) whose name(s) is/are ledged to me that he/she/they executed the same in is/her/their signature(s) on the instrument the person(s), ited, 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.
ALEX CHAPLES BROWN JR	WITNESS my hand and official seal.
Nistary Public – California Contra Costa County	
Commission # 2191627 My Comm. Expires Apr 14, 2021	Signature (
	Signature of Notary Public
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	American Commencer Commenc
Place Notary Seal Above	
	TIONAL
**	information can deter alteration of the document or information an unintended document.
Description of Attached Document	
Title or Type of Document:	Document Date:
Number of Pages: Signer(s) Other Tha	n Named Above:
Capacity(les) Claimed by Signer(s)	
Signer's Name:	Signer's Name:
Corporate Officer — Title(s):	☐ Corporate Officer — Title(s):
☐ Partner — ☐ Limited ☐ General	☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact	☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator	
	Other:

ASSIGNMENT

WHEREAS I, Edward Walter residing at Boerne, Texas hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "REDUCING INTERFERENCE IN RADIO BROADCAST BANDS" having AT&T Docket No. 2016-1681, patent application number 15/914,313 and was filed March 7, 2018 and 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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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 be	ereunto set my hand this <u>[O</u> ⁶ day of <u>MARC</u> H
2018.	
	Dans DLO II
	Edward Walter
State of Texas)	
County of <u>kendall</u>	
On this <u>lb</u> day of <u>March</u> ,	2018, before me a Notary Public in and for the above
County and State, personally appeared Ed	ward Walter, and acknowledged the execution of the
foregoing assignment as his/her free act at	nd deed for the purpose herein set forth.
Sylvah Naloz- Nasary Public	. E ŝ
Nútéry Public	My Commission Expires: <u>42年 1262</u> 0

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