505233082 12/12/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
PAUL SHALA HENRY	09/15/2016
THOMAS M. WILLIS III	09/15/2016
ROBERT BENNETT	09/15/2016
FARHAD BARZEGAR	09/19/2016
IRWIN GERSZBERG	09/15/2016
DONALD J. BARNICKEL	09/19/2016

RECEIVING PARTY DATA

Name:	AT&T INTELLECTUAL PROPERTY I, L.P.
Street Address:	675 W. PEACHTREE STREET
Internal Address:	SUITE 4000
City:	ATLANTA
State/Country:	GEORGIA
Postal Code:	30308

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16198120

CORRESPONDENCE DATA

Fax Number: (847)510-0710

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.

Email: docketing@ggip.com

Correspondent Name: AT&T LEGAL DEPARTMENT - GG ATTN: PATENT

Address Line 1: ROOM 2A-207
Address Line 2: ONE AT&T WAY

Address Line 4: BEDMINSTER, NEW JERSEY 07921

ATTORNEY DOCKET NUMBER:	7785-1184D-01
NAME OF SUBMITTER:	JENNIFER SWANSON
SIGNATURE:	/Jennifer Swanson/
DATE SIGNED:	12/12/2018

PATENT 505233082 REEL: 047757 FRAME: 0019

Total Attachments: 8 source=7785-1184-04_SIGNED_ASSIGNMENT#page1.tif source=7785-1184-04_SIGNED_ASSIGNMENT#page2.tif source=7785-1184-04_SIGNED_ASSIGNMENT#page3.tif source=7785-1184-04_SIGNED_ASSIGNMENT#page4.tif source=7785-1184-04_SIGNED_ASSIGNMENT#page5.tif source=7785-1184-04_SIGNED_ASSIGNMENT#page6.tif source=7785-1184-04_SIGNED_ASSIGNMENT#page7.tif source=7785-1184-04_SIGNED_ASSIGNMENT#page8.tif

PATENT REEL: 047757 FRAME: 0020

ASSIGNMENT

WHEREAS We, PAUL SHALA HENRY, residing at 7 Crow Field Lane, Holmdel, NJ 07733, and THOMAS M. WILLIS III, residing at 10 Beverly Court, Tinton Falls, NJ 07724, and ROBERT BENNETT, residing at 1540 North Bayview Rd EXT, Southold, NY 11971, and FARHAD BARZEGAR, residing at 14 Farrington Lane, Branchburg, NJ 08876, and IRWIN GERSZBERG, residing at 12 Dickinson Road, Kendall Park, NJ 08824, and DONALD J BARNICKEL, residing at 3 Wells Road, Flemington, NJ 08822, hereinafter referred to as Assignor, am listed as an inventor on a patent application entitled APPARATUS AND METHODS FOR SENDING OR RECEIVING ELECTROMAGNETIC SIGNALS; having AT&T Docket No. 2015-0215CIP2, US Patent Application Serial no. ______16/198,120_____, for a full description of which reference is here made to an application for Letters Patent of the United States; 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 W. Peachtree Street, Suite 4000, 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, 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, substitudents, 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; Assignor also authorizes the Assignee, any agent of the Assignee, and any attorney of the Assignee to fill in the U.S. Application Serial No. above, and any further identification information, if required;

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.

State of New Jersel

County of Monmorth

On this 15 day of September, 2016, before me a Notary Public in and for the above County and State, personally appeared

Horal Shala Henry, 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:

My Commission Expires:

My Commission Expires 12/1/2020

IN TESTIMONY WHEREOF, I have hereunto set my hand this 15th day of Sept, 2016. Howas M. Willis III
State of New Sursey)
County of Monmouth)
On this 15 day of September, 2016, before me a Notary Public in and
for the above County and State, personally appeared
Thomas M. Willis III, and acknowledged the execution of the foregoing
assignment as his/her free act and deed for the purpose herein set forth.
NANCY A. HENDERSON NOTARY PUBLIC OF NEW JERSEY I.D. # 50027401
Nothery Public My Commission Expires: My Commission Expires 121/2020

IN TESTIMONY WHEREOF, I have hereunto set my hand this 15 day of Sept., 2016. ROBERT BENNETT
State of New Terseer County of Monmouth
On this 15 day of September, 2016, before me a Notary Public in and for the above County and State, personally appeared, 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: NANCY A. HENDERSON NOTARY PUBLIC OF NEW JERSEY I.D. # 50027401 My Commission Expires 12/1/2020

IN TESTIMONY WHEREOF, I have hereunto set my hand this 19 day of September, 2016. Tankad Busser FARHAD BARZEGER
State of Down Jersey) County of Monmouth)
On this 19 day of Septem bere. 2016, before me a Notary Public in and for the above County and State, personally appeared According to the december of the foregoing assignment as his/her free act and deed for the purpose herein set forth.
Notary Public My Commission Expires: NANCY A. HENDERSON NOTARY PUBLIC OF NEW JERSEY I.D. # 50027401 My Commission Expires 12/1/2020

IN TESTIMONY WHEREOF, I ha	ve hereunto set my hand this	15 day of Sep Tender 2016.
	2/	
	IRWIN GERS	ZBERG -
State of New Sussey) County of Mormoreth		
County of Mormoreth)		
On this 15 day of	eptember. 20	016, before me a Notary Public in and
for the above County and State, pers		
Trwin Herszlo	and acknow	vledged the execution of the foregoing
assignment as his/her free act and de	eed for the purpose herein set	forth.
Jancy G. Henderson	`	NANCY A. HENDERSON NOTARY PUBLIC OF NEW JERSEY
Notary Public	My Commission Expires:	I.D. # 50027401 My Commission Expires 12/1/2020

IN TESTIMONY WHEREOF, I have hereunto set my hand this 19	day of <i>SEPT</i> . , 2016.
IN TESTIMONY WHEREOF, I have hereunto set my hand this 19	Buricles
DONALD J KARN	NICKEL
State of Norman (4)	
County of Monmouth)	
On this 19 day of Slotenber, 2016,	before me a Notary Public in and
for the above County and State, personally appeared	
Dorald J. Barpichel, and acknowledge	ged the execution of the foregoing
assignment as his/her free act and deed for the purpose herein set fort	h.
Dancy Co Handerson	NANCY A. HENDERSON IOTAR P. BLIC OF NEW JERSEY
Notary Public My Commission Expires:	# 50027401 By Commission Expires 12/1/2020