505156251 10/24/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5203018

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
THOMAS M. WILLIS III	10/10/2017
GIOVANNI VANNUCCI	10/10/2017
PAUL SHALA HENRY	10/11/2017
ROBERT BENNETT	10/10/2017
FARHAD BARZEGAR	10/10/2017
IRWIN GERSZBERG	10/10/2017
DONALD J. BARNICKEL	10/12/2017

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:	16145494

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:	7785-1184M-01
NAME OF SUBMITTER:	JENNIFER SWANSON
SIGNATURE:	/Jennifer Swanson/

PATENT 505156251 REEL: 047291 FRAME: 0574

DATE SIGNED:	10/24/2018
Total Attachments: 9	
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PATENT REEL: 047291 FRAME: 0575

ASSIGNMENT

WHEREAS We, THOMAS M. WILLIS III, residing at 10 Beverly Court, Tinton Falls, NJ 07724, and GIOVANNI VANNUCCI, residing at 329 Rutledge Dr, Middletown, NJ 07701, and PAUL SHALA HENRY, residing at 7 Crow Field Lane, Holmdel, NJ 07733, 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 INDUCING ELECTROMAGNETIC WAVES ON A CABLE; having AT&T Docket No. 2015-0215CIP11, US Patent Application Serial no. 15/811,312 , 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, 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; 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.

IN TESTIMONY WHEREOF. I hav	<i>() 1</i>	sex M. Willis III	2017.
State of New Surgery) County of Monmouth)			
On this 10 day of 6	october, 20	017, before me a Notary Public	c in and
for the above County and State, pers Thomas M W U		vledged the execution of the fo	oregoing
assignment as his/her free act and de			
Notary Public Denderso	17) My Commission Expires:	NANCY A. HENDERSO NOTARY PUBLIC OF NEW JE Comm. # 50027401 My Commission Expires 12/1/	RSEY

, 5+

IN TESTIMONY WHEREOF, I	ν	this 10th day of October, 2017.
	GIOVAN	NI VANNUCCI
State of NWSUSUS County of Monmon	II IA	
On this <u>10</u> day of	October	_, 2017, before me a Notary Public in and
for the above County and State, p		knowledged the execution of the foregoing
assignment as his/her free act and		
n		NANCY A. HENDERSON
Morary Public Pender	My Commission Expire	NOTARY PUBLIC OF NEW JERSEY Comm. # 50027401

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of PAUL SHALA MENRY	f <u>O c ¹</u> , 2017.
State of New Speed (Country of Manyouth)	
On this 11 day of Octoboo , 2017, before m	ne a Notary Public in and
for the above County and State, personally appeared The state of the purpose herein set forth.	xecution of the foregoing
Manay (a. tenderson Com	A. HENDERSON UBLIC OF NEW JERSEY Im. # 50027401 ssion Expires 12/1/2020

IN TESTIMONY WHEREOF, I have hereunto set my he	and this $\frac{10}{2}$ day of $\frac{0}{2}$ $\frac{4}{2}$, 2017.
O, i	Wall
ROBÉI	RT BENNETT
State of MCONOCH	
On this 10 day of 00 day	2017, before me a Notary Public in and
for the above County and State, personally appeared	
Robert Bennett, and	acknowledged the execution of the foregoing
assignment as his/her free act and deed for the purpose her	
Notary Public My Commission Expi	NANCY A. HENDERSON NOTARY PUBLIC OF NEW JERSEY Comm. # 50027401 My Commission Expires 12/1/2020

IN TESTIMONY WHEREOF, I have hereunto set my hand this 10 day of October, 2017. In the Country of October, 2017. FARHAD BARZEGAR
State of MUNICOUNTY OF MONTHALLER
On this 10 day of 2000., 2017, 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 Comm. # 50027401 My Commission Expires 12/1/2020

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of oct, 2017.
RWIN GERSZBERG
State of New Sursey County of Mary HA
On this 10 day of October, 2017, before me a Notary Public in and
for the above County and State, personally appeared Thur description, 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 Comm. # 50027401 My Commission Expires:

IN TESTIMONY WHEREOF, I have hereunto set my hand this 12th day of 00000000000000000000000000000000000
Doub J. Barnickel
State of New Sersey) County of Monmouth)
On this 12 day of Octobee , 2017, before me a Notary Public in and
for the above County and State, personally appeared Donald J. Boomschol , and acknowledged the execution of the foregoing
assignment as his/her free act and deed for the purpose herein set forth.
Notary Public Notary Public My Commission Expires: NANCY A. HENDERSON NOTARY PUBLIC OF NEW JERSEY Comm. # 50027401 My Commission Expires: My Commission Expires 12(1/2020)
My Commission Expires: My Commission Expires 12/1/2020