505901215 02/05/2020

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	07/30/2019
ED GUNTIN	12/04/2019
GIOVANNI VANNUCCI	07/30/2019
PETER WOLNIANSKY	08/01/2019
THOMAS M. WILLIS III	07/30/2019
ROBERT BENNETT	08/06/2019
FARHAD BARZEGAR	07/30/2019
IRWIN GERSZBERG	07/30/2019
DONALD J. BARNICKEL	08/06/2019

RECEIVING PARTY DATA

Name:	AT&T Intellectual Property I, L.P.
Street Address:	754 Peachtree Street
Internal Address:	Suite 7C
City:	Atlanta
State/Country:	GEORGIA
Postal Code:	30308

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16704011

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

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

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Address Line 4: BEDMINSTER, NEW JERSEY 07921

ATTORNEY DOCKET NUMBER: 2019-0292_7785-1970A

> **PATENT** REEL: 051728 FRAME: 0952

505901215

NAME OF SUBMITTER:	KRISTEN CARBERRY	
SIGNATURE:	/Kristen Carberry/	
DATE SIGNED:	02/05/2020	
Total Attachments: 11		
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PATENT REEL: 051728 FRAME: 0953

ASSIGNMENT

WHEREAS We, PAUL SHALA HENRY, residing at 7 Crow Field Lane, Holmdel, NJ 07733, and ED GUNTIN, residing at 117 S. Cook St, #358, Barrington, IL 60010, and GIOVANNI VANNUCCI, residing at 329 Rutledge Dr, Middletown, NJ 07701, and PETER WOLNIANSKY, residing at 82 Mount Tabor Way, Ocean Grove, NJ 07756, 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 METHOD AND APPARATUS HAVING ONE OR MORE ADJUSTABLE STRUCTURES FOR LAUNCHING OR RECEIVING ELECTROMAGNETIC WAVES HAVING A DESIRED WAVEMODE; having AT&T Docket No. 2019-0292, US Patent Application Serial no. 16/704,011 , 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 have	hereunto set my hand this	$\frac{3 g^{3/3}}{2}$ day of $\frac{3 g^{3/3}}{2019}$, 2019.
	- Sal (1)	
	PAUL SHAL	NHENRY)
State of New Sexage		~
County of Monmaile		
On this 뀣 day of 🚄	Wy	019, before me a Notary Public in and
for the above County and State, person	nally appeared	
taul Shala Her) EL, and acknow	wledged the execution of the foregoing
assignment as his/her free act and deed		
bancy a lender		MANCY A. HENDERSON NOTARY PUBLIC OF NEW JERSEY
Notary Public M	iy Commission Expires:	Comm. # 50027401 My Commission Expires 12/1/2020

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of <u>December</u> , 201	9.	
State of Illinois		
County of <u>lake</u>)		
On this 4th day of December, 2019, before me a Notary Public in	and	
for the above County and State, personally appeared		
Ed Guntin , and acknowledged the execution of the foreg	oing	
assignment as his/her free act and deed for the purpose herein set forth.		
Notary Public My Commission Expires: 8/06/22 OFFICIAL SEAL	``	
KEVIN H KELEHER NOTARY PUBLIC - STATE OF ILLINOIS MY COMMISSION EXPIRES:08:00:22	*** ****	

IN TESTIMONY WHEREOF, I have hereunto set my hand this 30th day of, 2019.
JOVANNI VANNUCCI
State of New Sursey) County of Monmonth
County of Monmay 4A
On this 20 day of 3019, before me a Notary Public in and
for the above County and State, personally appeared Lovanne vannuces, 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 Notary Public My Commission Expires: Wy Commission Expires 12/1/2020
my Commission Expires 12/1/2020

IN TESTIMONY WHEREO	DF, I have hereunto set my hand this	1 day of AUG . 2019.
	VETEN WOL	NIANSKY
State of NW SUS	· 식	
County of Honory		
On this day	ordugust 2	019, before me a Notary Public in and
	ute, personally appeared	
Meter Wolni	206K4, and acknow	vledged the execution of the foregoing
assignment as his/her free ac	t and deed for the purpose herein set	forth.
Manay Corlendo	340	NANCY A. HENDERSON NOTARY PUBLIC OF NEW JERSEY
Notary Public	My Commission Expires:	Comm. # 50027401 My Commission Expires 12/1/2020

IN TESTIMONY WHEREOF, I have hereunto set my hand this THOMAS M.	<u> 21/1/2/45</u>
State of MW Xersey) County of Monmonth	
County of Monmoule's	
On this Day of July 20	019, before me a Notary Public in and
for the above County and State, personally appeared	
Thomas Mullis III., and acknow	wledged the execution of the foregoing
assignment as his/her free act and deed for the purpose herein set	forth.
America II. desc	60 8 22 02 24
Notary Public My Commission Expires:	NANCY A. HENDERSON NOTARY PUBLIC OF NEW JERSEY Comm. # 50027401 My Commission Expins 12/1/2020

IN TESTIMONY WHEREOF	7. I have hereunto set my hand thi	s <u>C</u> day of <u>A-19</u> , 2019.
	ROBERT BE	ENNETT
State of 100 Keys	4) B)	
		2019, before me a Notary Public in and
for the above County and State	e, personally appeared	
<u>*Yout Beni</u>	<u>02tt </u>	wledged the execution of the foregoing
	and deed for the purpose herein se	
Anna Od L	7.Pom	NANCY A. HENDERSON
Notary Public	グ) My Commission Expires:	NOTARY PUBLIC OF NEW JERSEY Comm. # 50027401 My Commission Expires 12/1/2020

IN TESTIMONY WHEREOF, I have hereunto set my hand	this 30 day of July 2019.
FARHAD)	BARZEGAR
State of DUD SUEW	
County of MOnnoula	
On this Day of July	, 2019, before me a Notary Public in and
for the above County and State, personally appeared	
Farfad Barzege, and ack	nowledged the execution of the foregoin
assignment as his/her free act and deed for the purpose herein	set forth.
<u>Janay Co Henderson</u> Notary Public My Commission Touris	NANCY A. HENDERSON NOTARY PUBLIC OF NEW JERSEY Comm. \$ 50027401

My Commission Expires: My Commission Expires 12/1/2020

Notary Public

IN TESTIMONY WHEREOF, I	have hereunto set my hand th	ís <u> </u>
,	IRWIN GEI	RSZBERG
State of New Sursky)	
County of Monthsouth	.)	
On this <u>D</u> day of _	July	2019, before me a Notary Public in and
for the above County and State, pe	ersonally appeared	
Jun Jerozbe	and ackno	owledged the execution of the foregoing
assignment as his/her free act and	deed for the purpose herein s	et fonh.
Janua Orlenduson		NANCY A. HENDERSON NOTARY PUBLIC OF NEW JERSEY
Notary Public	My Commission Expires: _	Comm. # 50027401 My Commission Expires 12/1/2020

IN TESTIMONY WHEREOF, I have hereunto set n	by hand this day of Accost, 2019.
A	July Bariel D
· · · · · · · · · · · · · · · · · · ·	NALD J. BARNICKEL
State of All Susses	
County of Monning (4)	
On this & day of August	
for the above County and State, personally appeared	
Sonald I Barnickel,	and acknowledged the execution of the foregoing
assignment as his/her free act and deed for the purpos	se herein set forth.
•	
Locate Henderson	NANCY A. HENDERSON NOTARY PUBLIC OF NEW JERSEY Comm. # 5002740.

My Commission Expires: ___

Comm. # 50027401

My Commission Expires 12/1/2020

Notary Public