PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4941144

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YUPENG JIA	04/25/2018
YONGHUI TONG	04/25/2018
HONGYAN LEI	04/25/2018

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:	15958047

CORRESPONDENCE DATA

Fax Number: (216)696-8731

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: 216-696-8730

Email: epas@thepatentattorneys.com AMIN, TUROCY & WATSON, LLP **Correspondent Name:**

Address Line 1: 127 PUBLIC SQUARE

Address Line 2: 57TH FLOOR, KEY TOWER Address Line 4: CLEVELAND, OHIO 44114

ATTORNEY DOCKET NUMBER:	2017-1648/ATTWP1020US
NAME OF SUBMITTER:	THOMAS E. WATSON
SIGNATURE:	/Thomas E. Watson/
DATE SIGNED:	05/01/2018

Total Attachments: 6

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ASSIGNMENT

WHEREAS I, Yupeng Jia residing at 3906 Tilley Street, Austin, TX 78723, hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "DYNAMIC MANAGEMENT OF DEFAULT SUBCARRIER SPACING FOR 5G OR OTHER NEXT GENERATION NETWORK" having AT&T Docket No. 2017-1648, 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 Georgia 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;

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 WHEREOI	F, I have hereunto set my hand this 25 day of APPLA
20	Vamoria
	Yupeng Jia Company
are e	Tupong 7.11
State of 12xas	*
County of Travis	
On this 25 day of April	, 20 18, before me a Notary Public in and for the above County
acknowledged the execution of the for	regoing assignment as his/her free act and deed for the purpose
herein set forth.	
amy R. Amar	
Notary Rublic	sion Expires: 8-10-20
My Commiss	ion Expires: 07/07/07/0

Page 2 of 2

AMY R NORMAN
Notary Public, State of Texas
Comm. Expires 08-10-2020
Notary ID 12023541

ASSIGNMENT

WHEREAS I, Yonghui Tong residing at 400 Park Creek Dr., Alpharetta, GA 30005, hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "DYNAMIC MANAGEMENT OF DEFAULT SUBCARRIER SPACING FOR 5G OR OTHER NEXT GENERATION NETWORK" having AT&T Docket No. 2017-1648, the patent application to be filed in the United States Patent & Trademark Office; and

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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.

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Assignment, including the signature pages nereto, sn	all be deemed to be an original.
IN TESTIMONY WHEREOF, I have hereur	nto set my hand this 25th day of April,
20 8.	Jones !
You	nghưi Tong
State of Georgia)	V
County of Dekalb	
On this 25 day of April , 2018, before and State, personally appeared you have to a acknowledged the execution of the foregoing assign herein set forth.	re me a Notary Public in and for the above County, and ment as his/her free act and deed for the purpose
Notary Public My Commission Expires:	Fugust 6 th 2021

Page 2 of 2

ASSIGNMENT

WHEREAS I. Hongyan Lei residing at 8208 Spring Valley Ln, Plano, TX 75025, hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "DYNAMIC MANAGEMENT OF DEFAULT SUBCARRIER SPACING FOR 5G OR OTHER NEXT GENERATION NETWORK" having AT&T Docket No. 2017-1648, the patent application to be filed in the United States Patent & Trademark Office; and

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	IN TESTIMONY WHEREOF, I have bereunto set my hand this Z \(\sqrt{a} \) day of $\(\frac{4\rho c}{2\cdot} \).$	
20 18 .	4120gU 2	
	Hongyan L.J.	
State of	(Zees)	
County	or C_// / <u>\</u>	
On this	25 day of $40c^{-2}$ 20/8, before me a Notary Public in and for the above County the personally appeared 40^{-2} and 40^{-2} and 40^{-2} declared the execution of the foregoing assignment as his/her free act and deed for the purpose	
and Stat	ite, personally appeared Honeyan Ce., and	

herein s	sortonia,	
18	415	
Mary	Park	~~
	My Commission Expires: 20 2012 SAMUEL J. GAF	
	STATE OF TEXA	
	My Comm. Exp. 12-1	13-1

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