505345033 02/25/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5391816

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
SEQUENCE:	1

CONVEYING PARTY DATA

Name	Execution Date
AJAY MAHIMKAR	12/07/2015
DAVID LEE APPLEGATE	12/07/2015
SARAT PUTHENPURA	12/04/2015
ZIHUI GE	12/07/2015
SWATI ROY	12/16/2015

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:	16284795

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: 732-542-2280

Email: khunter@trbklaw.com

Correspondent Name: AT&T LEGAL DEPARTMENT - TRBK

Address Line 1: ONE AT&T WAY
Address Line 2: ROOM 2A-212

Address Line 4: BEDMINSTER, NEW JERSEY 07921

ATTORNEY DOCKET NUMBER:	2015-0729CON
NAME OF SUBMITTER:	TARA NEWMAN
SIGNATURE:	/T. Newman/
DATE SIGNED:	02/25/2019

PATENT 505345033 REEL: 048429 FRAME: 0035

Total Attachments: 10 source=2015-0729CON_Assignment_ATTIPILP#page1.tif source=2015-0729CON_Assignment_ATTIPILP#page2.tif source=2015-0729CON_Assignment_ATTIPILP#page3.tif source=2015-0729CON_Assignment_ATTIPILP#page4.tif source=2015-0729CON_Assignment_ATTIPILP#page5.tif source=2015-0729CON_Assignment_ATTIPILP#page6.tif source=2015-0729CON_Assignment_ATTIPILP#page7.tif source=2015-0729CON_Assignment_ATTIPILP#page8.tif source=2015-0729CON_Assignment_ATTIPILP#page9.tif source=2015-0729CON_Assignment_ATTIPILP#page9.tif source=2015-0729CON_Assignment_ATTIPILP#page10.tif

PATENT REEL: 048429 FRAME: 0036

WHEREAS I, Ajay Mahimkar residing at Woodbridge, New Jersey hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "METHOD AND APPARATUS FOR TRANSMITTING A CONTROL SIGNAL TO A SELF ORGANIZING NETWORK CONTROLLER" having AT&T Docket No. 2015-0729, 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

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 <u>67</u> day of <u>DECEMIZER</u>
2015. Ajay Mahinkar
State of NJ)
County of <u>Somesset</u>)
On this $\frac{1}{2}$ day of $\frac{1}{2}$ day of $\frac{1}{2}$, 2015, before me a Notary Public in and for the above
County and State, personally appeared Ajay Mahimkar, and acknowledged the execution of the
foregoing assignment as his/her free act and deed for the purpose herein set forth.

My Commission Expires: GAIL PETZ

MY Commission Expires: HOTARY PUBLIC OF NEW JERSEY

ID # 2438146

My Commission Expires 9/6/2018

WHEREAS I, David Lee Applegate residing at Maplewood, New Jersey hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "METHOD AND APPARATUS FOR TRANSMITTING A CONTROL SIGNAL TO A SELF ORGANIZING NETWORK CONTROLLER" having AT&T Docket No. 2015-0729, 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

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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	day of Pecember,
2015.	David Lee Applegate	
State of)		
County of Somer so7		
On this 7 day of DEC	_, 2015, before me a Notary Pub	lic in and for the above
County and State, personally appeared $\underline{\mathbf{D}}$	avid Lee Applegate, and ackno	wledged the execution of
the foregoing assignment as his/her free	act and deed for the purpose here	ein set forth.
Richard Seto Yea Notary Public	My Commission Expires: _	
		My Commission Expires 10/22/2018

WHEREAS I, Sarat Puthenpura residing at Berkeley Heights, New Jersey hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "METHOD AND APPARATUS FOR TRANSMITTING A CONTROL SIGNAL TO A SELF ORGANIZING NETWORK CONTROLLER" having AT&T Docket No. 2015-0729, 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

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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	4 day of December
2015.	
Sarat Puthen pura	V-
State of	
County of Somansur	
On this $\frac{\mathcal{Y}}{\mathcal{Y}}$ day of $\frac{\mathcal{D}_{\mathcal{E}}}{\mathcal{E}_{\mathcal{E}}}$, 2015, before me a Notan	ry Public in and for the above
County and State, personally appeared Sarat Puthenpura , and act	cnowledged the execution of
the foregoing assignment as his/her free act and deed for the purpo	se herein set forth.
Richard Seto Yea	RICHARD SETO YEE
Notary Public My Commission Exp	
	E) # 2429224

My Commission Exertes 10/22/2018

WHEREAS I, Zihui Ge residing at Madison, New Jersey hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "METHOD AND APPARATUS FOR TRANSMITTING A CONTROL SIGNAL TO A SELF ORGANIZING NETWORK CONTROLLER" having AT&T Docket No. 2015-0729, 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

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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 h	ereunto set my hand this	_day of <u>DeC.</u> ,
2015.		
	Zihui Ge	<u></u>
State of		
County of Schmerson		
On this 7 day of NCC,	2015, before me a Notary Pub	lic in and for the above
County and State, personally appeared Zih	ui Ge, and acknowledged the	execution of the
foregoing assignment as his/her free act an	d deed for the purpose herein s	set forth.
Kickard Seto Tre Notary Public	My Commission Expires: _	RICHARD SETO YEE NOTARY PLEUC OF NEW JERSEY D # 2436861 My Commission Expires 10/22/2018

WHEREAS I, Swati Roy residing at Princeton, New Jersey hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "METHOD AND APPARATUS FOR TRANSMITTING A CONTROL SIGNAL TO A SELF ORGANIZING NETWORK CONTROLLER" having AT&T Docket No. 2015-0729, 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

Į,

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 16th day of DECEMBER 2015.

> Swati Swati Roy

On this 16 day of December , 2015, before me a Notary Public in and for the above County and State, personally appeared Swati Roy, 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: Feb. 3, 2018

SHAUN IN MATHIS THOTARY PUBLIC Pollen County Siste of Geomia Tdy Comm. Expires Fab. 3, 2018

PATENT REEL: 048429 FRAME: 0046