

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT2685102

SUBMISSION TYPE:	NEW ASSIGNMENT																				
NATURE OF CONVEYANCE:	ASSIGNMENT																				
CONVEYING PARTY DATA																					
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>BRIAN S. AMENTO</td> <td>12/16/2013</td> </tr> <tr> <td>MATTI A. HILTUNEN</td> <td>12/13/2013</td> </tr> <tr> <td>KAUSTUBH JOSHI</td> <td>12/16/2013</td> </tr> <tr> <td>DAVID P. KORMANN</td> <td>12/16/2013</td> </tr> <tr> <td>RAJESH KRISHNA PANTA</td> <td>01/16/2014</td> </tr> <tr> <td>KERMIT HAL PURDY</td> <td>12/16/2013</td> </tr> <tr> <td>THOMAS M. SMITH</td> <td>12/17/2013</td> </tr> <tr> <td>ALEX VARSHAVSKY</td> <td>12/18/2013</td> </tr> <tr> <td>SVETLANA YAROSH</td> <td>12/16/2013</td> </tr> </tbody> </table>		Name	Execution Date	BRIAN S. AMENTO	12/16/2013	MATTI A. HILTUNEN	12/13/2013	KAUSTUBH JOSHI	12/16/2013	DAVID P. KORMANN	12/16/2013	RAJESH KRISHNA PANTA	01/16/2014	KERMIT HAL PURDY	12/16/2013	THOMAS M. SMITH	12/17/2013	ALEX VARSHAVSKY	12/18/2013	SVETLANA YAROSH	12/16/2013
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ALEX VARSHAVSKY	12/18/2013																				
SVETLANA YAROSH	12/16/2013																				
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																					
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>14133408</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	14133408																
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Application Number:	14133408																				
CORRESPONDENCE DATA																					
Fax Number:																					
Phone:	(732)542-2280																				
Email:	RCOWEN@WALLTONG.COM																				
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>																					
Correspondent Name:	RYAN S. COWEN/WALL&TONG																				
Address Line 1:	25 JAMES WAY																				
Address Line 4:	EATONTOWN, NEW JERSEY 07724																				

NAME OF SUBMITTER:	KIN-WAH TONG
Signature:	/Kin-Wah Tong/
Date:	01/16/2014
Total Attachments: 18 source=2013-0943_eAssignment#page1.tif source=2013-0943_eAssignment#page2.tif source=2013-0943_eAssignment#page3.tif source=2013-0943_eAssignment#page4.tif source=2013-0943_eAssignment#page5.tif source=2013-0943_eAssignment#page6.tif source=2013-0943_eAssignment#page7.tif source=2013-0943_eAssignment#page8.tif source=2013-0943_eAssignment#page9.tif source=2013-0943_eAssignment#page10.tif source=2013-0943_eAssignment#page11.tif source=2013-0943_eAssignment#page12.tif source=2013-0943_eAssignment#page13.tif source=2013-0943_eAssignment#page14.tif source=2013-0943_eAssignment#page15.tif source=2013-0943_eAssignment#page16.tif source=2013-0943_eAssignment#page17.tif source=2013-0943_eAssignment#page18.tif	

ASSIGNMENT

WHEREAS I, **Brian S. Amento** residing at **Morris Plains, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "**METHOD AND APPARATUS FOR CONTROLLING A ROADWAY RESOURCE**" having AT&T Docket No. **2013-0943**, 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 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 16 day of December, 2013.



Brian S. Amento

State of New Jersey)
County of Somerset)

On this 16 day of December, 2013, before me a Notary Public in and for the above County and State, personally appeared **Brian S. Amento**, 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: _____
GAIL PETZ
NOTARY PUBLIC OF NEW JERSEY
ID # 2438146
My Commission Expires 9/6/2012

ASSIGNMENT

WHEREAS I, **Matti A. Hiltunen** residing at **Morristown, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "**METHOD AND APPARATUS FOR CONTROLLING A ROADWAY RESOURCE**" having AT&T Docket No. **2013-0943**, 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

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.

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IN TESTIMONY WHEREOF, I have hereunto set my hand this 13 day of DEC, 2013.

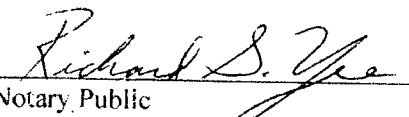


Matti A. Hiltunen

State of NJ)

County of SOMERSET)

On this 13 day of DEC, 2013, before me a Notary Public in and for the above County and State, personally appeared **Matti A. Hiltunen**, 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: _____

RICHARD SETO YEE
NOTARY PUBLIC OF NEW JERSEY
ID # 2430361
My Commission Expires 10/23/2018

ASSIGNMENT

WHEREAS I, **Kaustubh Joshi** residing at **Scotch Plains, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "**METHOD AND APPARATUS FOR CONTROLLING A ROADWAY RESOURCE**" having AT&T Docket No. **2013-0943**, 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;

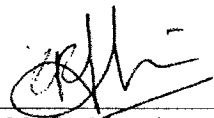
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possible to aid Assignee, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee; 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.

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IN TESTIMONY WHEREOF, I have hereunto set my hand this 16 day of DECEMBER 2013.

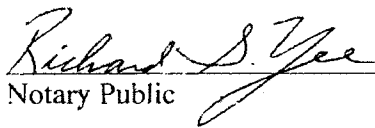


Kaustubh Joshi

State of NS)

County of SOMERSET)

On this 16 day of December, 2013, before me a Notary Public in and for the above County and State, personally appeared **Kaustubh Joshi**, 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: **RICHARD SETO YEE**
NOTARY PUBLIC OF NEW JERSEY
ID # 2438861
My Commission Expires 10/22/2018

ASSIGNMENT

WHEREAS I, **David P. Kormann** residing at **Morristown, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "**METHOD AND APPARATUS FOR CONTROLLING A ROADWAY RESOURCE**" having AT&T Docket No. **2013-0943**, 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;

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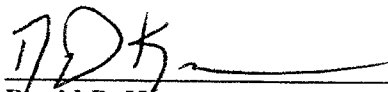
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possible to aid Assignee, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee; 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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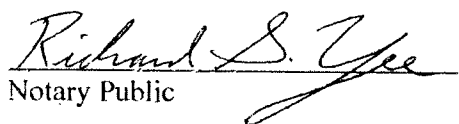


David P. Kormann

State of New Jersey)

County of Morris)
SOMERSET

On this 16 day of DECEMBER, 2013, before me a Notary Public in and for the above County and State, personally appeared **David P. Kormann**, 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: _____
RICHARD SETO YEE
NOTARY PUBLIC OF NEW JERSEY
ID # 2438861
My Commission Expires 10/22/2018

ASSIGNMENT

WHEREAS I, **Rajesh Krishna Panta** residing at **Bridgewater, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "**METHOD AND APPARATUS FOR CONTROLLING A ROADWAY RESOURCE**" having AT&T Docket No. **2013-0943**, filed December 18, 2013, in the United States Patent & Trademark Office and assigned patent application number 14/133,408, 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;

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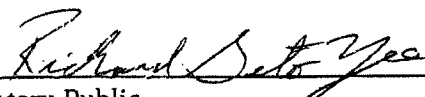


Rajesh Krishna Panta

State of NT)

County of Somerset)

On this ___ day of JAN 16 2014, 2014, before me a Notary Public in and for the above County and State, personally appeared **Rajesh Krishna Panta**, 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: **RICHARD SETO YEE**
NOTARY PUBLIC OF NEW JERSEY
ID # 2438861
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ASSIGNMENT

WHEREAS I, **Kermit Hal Purdy** residing at **Bernardsville, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "**METHOD AND APPARATUS FOR CONTROLLING A ROADWAY RESOURCE**" having AT&T Docket No. **2013-0943**, 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;

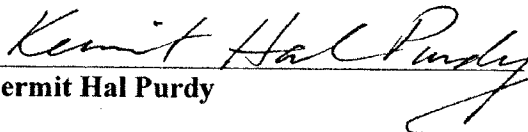
AND, I HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention; assist the Assignee in the prosecution of the patent 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

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 16 day of December 2013.


Kermit Hal Purdy

State of New Jersey)
County of Somerset)

On this 16 day of December, 2013, before me a Notary Public in and for the above County and State, personally appeared **Kermit Hal Purdy**, 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: _____
GAIL PETZ
NOTARY PUBLIC OF NEW JERSEY
ID # 2438146
My Commission Expires 9/6/2018

Docket No. 2013-0943

ASSIGNMENT

WHEREAS I, **Thomas M. Smith** residing at **Westfield, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "**METHOD AND APPARATUS FOR CONTROLLING A ROADWAY RESOURCE**" having AT&T Docket No. **2013-0943**, 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

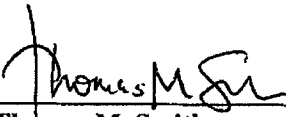
Docket No. 2013-0943

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 17 day of December, 2013.

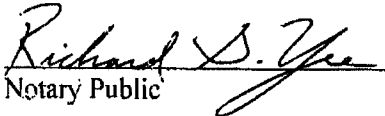


Thomas M. Smith

State of New Jersey)

County of Somerset)

On this 17 day of December, 2013, before me a Notary Public in and for the above County and State, personally appeared **Thomas M. Smith**, 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: _____

RICHARD SETO YEE
NOTARY PUBLIC OF NEW JERSEY
ID # 2439861
My Commission Expires 10/23/2018

ASSIGNMENT

WHEREAS I, **Alex Varshavsky** residing at **East Hanover, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "**METHOD AND APPARATUS FOR CONTROLLING A ROADWAY RESOURCE**" having AT&T Docket No. **2013-0943**, 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;

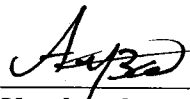
AND, I HEREBY further covenant and agree, for the Assignor and the Assignor's legal representatives, that I will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention; assist the Assignee in the prosecution of the patent 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

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 18 day of December 2013.

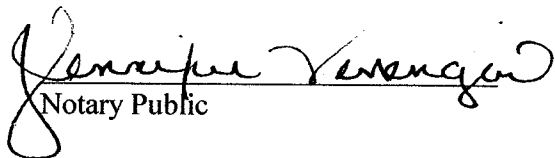


Alex Varshavsky

State of New Jersey)

County of Somerset)

On this 18 day of December, 2013, before me a Notary Public in and for the above County and State, personally appeared Alex Varshavsky, 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: _____

JENNIFER MARIE VERRENGIA
NOTARY PUBLIC OF NEW JERSEY
ID # 2437879
My Commission Expires 8/29/2018

ASSIGNMENT

WHEREAS I, **Svetlana Yarosh** residing at **Morristown, New Jersey** hereafter referred to as Assignor, am listed as an inventor on a patent application entitled "**METHOD AND APPARATUS FOR CONTROLLING A ROADWAY RESOURCE**" having AT&T Docket No. **2013-0943**, 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;

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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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IN TESTIMONY WHEREOF, I have hereunto set my hand this 16 day of December, 2013.



Svetlana Yarosh

State of New Jersey)
County of Somerset)

On this 16 day of December, 2013, before me a Notary Public in and for the above County and State, personally appeared Svetlana Yarosh, 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: _____

GAIL PETZ
NOTARY PUBLIC OF NEW JERSEY
ID # 2438146
My Commission Expires 9/6/2018