504762995 02/05/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4809723

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SRILAKSHMI REDDY VALISAMMAGARI	01/03/2018
MUKESH KUMAR	01/04/2018
GANESH NARAYAN	01/03/2018
SANJAY RAVINDRA RANADE	01/03/2018
CHETAN B. GOPAL	01/03/2018
AMIT KAPOOR	01/09/2018
VIRAJ PAREKH	01/09/2018
SHRINATH KUPPA	01/03/2018

RECEIVING PARTY DATA

Name:	VERIZON PATENT AND LICENSING INC.
Street Address:	ONE VERIZON WAY
City:	BASKING RIDGE
State/Country:	NEW JERSEY
Postal Code:	07920

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15888371

CORRESPONDENCE DATA

Fax Number: (703)439-2658

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: 571-297-0007 **Email:** pto@snyderllp.com

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ATTORNEY DOCKET NUMBER:	20170527
NAME OF SUBMITTER:	THOMAS W. EDMAN
SIGNATURE:	/Thomas W. Edman, Reg. No. 51,643/

PATENT 504762995 REEL: 044832 FRAME: 0709

02/05/2018
This document serves as an Oath/Declaration (37 CFR 1.63).
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PATENT REEL: 044832 FRAME: 0710

DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

the patent application for which:	Patent Application Title: END-TO-END NETWORK SERVICE DESIGNER TOOL
As the below named inventor, I hereby declare that: • the above-identified application was made or authorized to be made by me; • I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-referenced application; and • I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both. Inventor Assignment Acknowledgement For good and valuable consideration, the receipt of which is hereby acknowledged, I agree as follows: A. I hereby assign to the Verizon legal entity identified below ("Assignee"), including its successors and assigns, my entire worldwide right, title and interest in and to any and all inventions and other ideas described in the above-identified patent application, as well as in and to said application and all divisional, continuing (in whole or in part), substitute, renewal, reissue, provisional or other applications or registrations for Letters Patent which have been or shall be filled in the United States and all foreign countries based on any of said inventions or ideas, or based on or claiming priority to said application; and in and to all original and reissued in the United States and foreign countries from any of said reissued on the United States and foreign countries from any of said applications or registrations, and in and to all rights of priority resulting from the filling of any of said applications (all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial denigns, and any other form of industrial property recognized under the Paris Convention for the Protection of industrial Property. B. I agree (i) that Assignee may apply for and receive Letters Patent based on the Patent Rights in its own name; (ii) that I will execute all rightful oaths, declarations, assignments, powers of attorney and other papers related to the Patent Rights	the patent application for which: Si is being filed concurrently herewith, Application Number to be assigned by the USPTO, or as United States Application Number.
the above-identified application was made or authorized to be made by me; I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-referenced application; and I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both. Inventor Assignment Acknowledgement For good and valuable consideration, the receipt of which is hereby acknowledged, I agree as follows: A. I hereby assign to the Verizon legal entity identified below ("Assignee"), including its successors and assigns, my entire worldwide right, tifle and interest in and to any and all inventions and other ideas described in the above-identified patent application, as well as in and to said application and all divisional, continuing (in whole or in part), substituted and interest in and to any and all inventions and other ideas described in the above-identified patent application, or other applications or registrations for Letters Patent which have been or shall be filed in the United States and all foreign countries based on any of said inventions or ideas, or based on or claiming priority to said applications or registrations (all original and reissued Letters Patent which have been or shall be issued in the United States and foreign countries from any of said inventions and in and to all rights of priority resulting from the filing of any of said applications or registrations (all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property. B. I agree (i) that Assignee may apply for and receive Letters Patent based on the Patent Rights in its own name; (ii) that I will excurse the patent Rights with full anthority in my place and stead and in my name to take any action and to exe	Declaration of Inventor
application; and I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both. Inventor Assignment Acknowledgement For good and valuable consideration, the receipt of which is hereby acknowledged. I agree as follows: A. I hereby assign to the Verizon legal entity identified below ("Assignee"), including its successors and assigns, my entire worldwide right, title and interest in and to any and all inventions and other ideas described in the above-dentified patent application, as well as in and to said application and all divisional, continuing (in whole or in part), substitute, renewal, reissue, provisional or other applications or registrations for Letters Patent which have been or shall be filed in the United States and all foreign countries based on any of said inventions or ideas, or based on or claiming priority to said application; and and to all original and reissued or registrations; and in and to all original and reissued on registrations; and in and to all rights of priority resulting from the filing of any of said applications or registrations (all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property. B. I agree (i) that Assignee may apply for and receive Letters Patent based on the Patent Rights in its own name; (ii) that I will execute all rightful oaths, declarations, assignments, powers of attorney and other papers related to the Patent Rights when requested through its representatives) as my attorney-in-fact, such appointment being irrevocable and coupled with the interest in the Patent Rights, with full authority in my place and stead and in my name to take any action and to execute any document which Assignee, to accession, assigns, representatives and agents,	As the below named inventor, I hereby declare that:
A. I hereby assign to the Verizon legal entity identified below ("Assignee"), including its successors and assigns, my entire worldwide right, title and interest in and to any and all inventions and other ideas described in the above-identified patent application, as well as in and to said application and all divisional, continuing (in whole or in part), substitute, renewal, reissue, provisional or other applications or registrations for Letters Patent which have been or shall be filted in the United States and all foreign countries based on any of said inventions or ideas, or based on or claiming priority to said application, and in and to all original and reissued based on any of said inventions or registrations for have been or shall be issued in the United States and foreign countries from any of said applications or registrations; and in and to all rights of priority resulting from the filing of any of said applications or registrations (all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property. B. I agree (i) that Assignee may apply for and receive Letters Patent based on the Patent Rights in its own name; (ii) that I will execute all rightful oaths, declarations, assignments, powers of attorney and other papers related to the Patent Rights when requested by Assignee (or its successors and/or assigns) without compensation (but at Assignee's expense). (iii) that I appoint Assignee (acting through its representatives) as my attorney-in-fact, such appointment being irrevocable and coupled with the interest in the Patent Rights, with full authority in my place and stead and in my name to take any action and to execute any document which Assignee (acting papers identified in part (iii) in my name where permitted by law; (iv) to communicate to Assignee, its successors, assigns, representatives and ag	application; and solution in the above-referenced solution in the above-referenced solution in the above-referenced solution in the above-referenced
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Full legal name of Inventor: Srilakshmi Reddy Valisammagari Address: 135 Windsor Drive, Murphy, TX 75094	by Assignee (or its successors and/or assigns) without compensation (but at Assignee's expense),; (iii) that I appoint Assignee (acting through its representatives) as my attorney-in-fact, such appointment being irrevocable and coupled with the interest in the Patent Rights, with full authority in my place and stead and in my name to take any action and to execute any document which Assignee may deem reasonably necessary or advisable to accomplish the purposes of this assignment, including the execution and filing of the papers identified in part (ii) in my name where permitted by law; (iv) to communicate to Assignee, its successors, assigns, representatives and agents, all facts known to me relating to said Patent Rights and the history thereof; and (v) to generally do everything which Assignee, its successors, assigns, representatives or agents shall consider desirable for aiding in securing and maintaining proper protection for said Patent Rights and for vesting title to said Patent Rights in Assignee, its successors and assigns. C. I covenant with Assignee, its successors and assigns, that no assignment, grant, mortgage, license, or other agreement affecting the Patent Rights has been made to others by me, and that full right to convey the same as set forth herein is possessed by me. ASSIGNEE: Verizon Patent and Licensing Inc., a Delaware Corporation with a place of business at One Verizon Way, Basking Ridge, NJ 07920 US
Address: 135 Windsor Drive, Murphy, TX 75094	as set forth below:
	Full legal name of Inventor: Srilakshmi Reddy Valisammagari
	Address: 135 Windsor Drive, Murphy, TX 75094

PATENT REEL: 044832 FRAME: 0711

DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

Patent Application Title: <u>END-TO-END NETWORK SERVICE DESIGNER TOOL</u>
the patent application for which: is being filed concurrently herewith, Application Number to be assigned by the USPTO, or was filed onas United States Application Numberor PCT International Application Number
Declaration of Inventor
As the below named inventor, I hereby declare that:
 the above-identified application was made or authorized to be made by me; I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-referenced application; and
 I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.
Inventor Assignment Acknowledgement
For good and valuable consideration, the receipt of which is hereby acknowledged, I agree as follows:
A. I hereby assign to the Verizon legal entity identified below ("Assignee"), including its successors and assigns, my entire worldwide right, title and interest in and to any and all inventions and other ideas described in the above-identified patent application, as well as in and to said application and all divisional, continuing (in whole or in part), substitute, renewal, reissue, provisional or other applications or registrations for Letters Patent which have been or shall be filed in the United States and all foreign countries based on any of said inventions or ideas, or based on or claiming priority to said application, and in and to all original and reissued Letters Patent which have been or shall be issued in the United States and foreign countries from any of said applications or registrations; and in and to all rights of priority resulting from the filing of any of said applications or registrations (all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property
B. I agree (i) that Assignee may apply for and receive Letters Patent based on the Patent Rights in its own name, (ii) that I will execute all rightful oaths, declarations, assignments, powers of attorney and other papers related to the Patent Rights when requested by Assignee (or its successors and/or assigns) without compensation (but at Assignee's expense). (iii) that I appoint Assignee (acting through its representatives) as my attorney-in-fact, such appointment being irrevocable and coupled with the interest in the Patent Rights, with full authority in my place and stead and in my name to take any action and to execute any document which Assignee may deem reasonably necessary or advisable to accomplish the purposes of this assignment, including the execution and filing of the papers identified in part (ii) in my name where permitted by law; (iv) to communicate to Assignee, its successors, assigns, representatives and agents, all facts known to me relating to said Patent Rights and the history thereof; and (v) to generally do everything which Assignee, its successors, assigns, representatives or agents shall consider desirable for aiding in securing and maintaining proper protection for said Patent Rights and for vesting title to said Patent Rights in Assignee, its successors and assigns.
C. I covenant with Assignee, its successors and assigns, that no assignment, grant mortgage, license, or other agreement affecting the Patent Rights has been made to others by me, and that full right to convey the same as set forth herein is possessed by me.
ASSIGNEE: Verizon Patent and Licensing Inc., a Delaware Corporation with a place of business at One Verizon Way, Basking Ridge, NJ 07920 US
IN WITNESS to my agreement to the foregoing Declaration of Inventor and Inventor Assignment Acknowledgement. I have executed as set forth below:
Full legal name of Inventor: Mukesh Kumar
Address: 5620 Sky Ridge Drive, Frisco, TX 75035 Signature Date: 0109/18

DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

Patent Application Title: END-TO-END NETWORK SERVICE DESIGNER TOOL

the patent application for which: is being filed concurrently herewith, Application Number to be assigned by the USPTO, or was filed on as United States Application Number or PCT International Application Number
Declaration of Inventor
As the below named inventor, I hereby declare that:
 the above-identified application was made or authorized to be made by me; I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-referenced application; and
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A. I hereby assign to the Verizon legal entity identified below ("Assignee"), including its successors and assigns, my entire worldwide right, title and interest in and to any and all inventions and other ideas described in the above-identified patent application, as well as in and to said application and all divisional, continuing (in whole or in part), substitute, renewal, reissue, provisional or other applications or registrations for Letters Patent which have been or shall be filed in the United States and all foreign countries based on any of said inventions or ideas, or based on or claiming priority to said application; and in and to all original and reissued Letters Patent which have been or shall be issued in the United States and foreign countries from any of said applications or registrations; and in and to all rights of priority resulting from the filing of any of said applications or registrations (all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property.
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C. I covenant with Assignee, its successors and assigns, that no assignment, grant, mortgage, license, or other agreement affecting the Patent Rights has been made to others by me, and that full right to convey the same as set forth herein is possessed by me.
ASSIGNEE: Verizon Patent and Licensing Inc., a Delaware Corporation with a place of business at One Verizon Way, Basking Ridge, NJ 07920 US
IN WITNESS to my agreement to the foregoing Declaration of Inventor and Inventor Assignment Acknowledgement, I have executed as set forth below:
Full legal name of Inventor: Ganesh Narayan
Address: 204, Aradhana, Gokuldham, Mumbai, India 400063
Signature: Date: Date: Date: Date: Date: Date: Date: Date:

PATENT REEL: 044832 FRAME: 0713

DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

Patent Application Title: END-TO-END NETWORK SERVI

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the above-identified application was made or authorized to be made by me; 1 believe that I am the original inventor or an original joint inventor of a claimed invention in the above-referenced application; and 1 hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both. Inventor Assignment Acknowledgement For good and valuable consideration, the receipt of which is hereby acknowledged, I agree as follows: A. I hereby assign to the Verizon legal entity identified below ("Assignee"), including its successors and assigns, my entire worldwide right, title and interest in and to any and all inventions and other ideas described in the above-identified patent application, as well as in and to said application and all divisional, continuing (in whole or in part), substitute, renewal, reissue, provisional or other applications or registrations for Letters Patent which have been or shall be filled in the United States and foreign countries other applications or registrations for Letters Patent which have been or shall be issued in the United States and foreign countries from any of said inventions or ideas, or based on or claiming priority to said applications or registrations (all collectively, the Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property. B. I agree (i) that Assignee may apply for and receive Letters Patent based on the Patent Rights in its own name; (ii) that I will execute all rightful caths, declarations, assignments, powers of attorney and other papers related to the Patent Rights when requested through its representatives) as my attorney-in-fact, such appointment being invocable and coupled with the interest in the Patent Rights, with full authority in my place and stead and in my name	Declaration of Inventor	
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A. I hereby assign to the Verizon legal entity identified below ("Assignee"), including its successors and assigns, my entire worldwide right, title and interest in and to any and all inventions and other ideas described in the above-identified patent application, as well as in and to said application and all divisional, continuing (in whole or in part), substitute, renewal, reissue, provisional or other applications or registrations for Letters Patent which have been or shall be filed in the United States and all foreign countries based on any of said inventions or ideas, or based on or claiming priority to said application; and in and to all original and reissued Letters Patent which have been or shall be issued in the United States and foreign countries from any of said applications or registrations; and in and to all rights of priority resulting from the filing of any of said applications or registrations (all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property. B. I agree (i) that Assignee may apply for and receive Letters Patent based on the Patent Rights in its own name; (ii) that I will execute all rightful oaths, declarations, assignments, powers of attorney and other papers related to the Patent Rights when requested by Assignee (or its successors and/or assigns) without compensation (but at Assignee' sexpense.); (iii) that I appoint Assignee (acting Rights, with full authority in my place and stead and in my name to take any action and to execute any document which Assignee may deem reasonably necessary or advisable to accomplish the purposes of this assignment, including the execution and filing of the papers identified in part (ii) in my name where permitted by law; (iv) to communicate to Assignee, its successors, assigns, representatives and agents, all facts known to me relating to s	application; and I hereby acknowledge that any willful false statement made in this declaration is application.	
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ASSIGNEE: Verizon Patent and Licensing Inc., a Delaware Corporation with a place of business at One Verizon Way, Basking Ridge, NJ 07920 US IN WITNESS to my agreement to the foregoing Declaration of Inventor and Inventor Assignment Acknowledgement, I have executed as set forth below: Full legal name of Inventor: Sanjay Ravindra Ranade	by Assignee (or its successors and/or assigns) without compensation (but at Assignee's expense),; (iii) through its representatives) as my attorney-in-fact, such appointment being irrevocable and coupled we Rights, with full authority in my place and stead and in my name to take any action and to execute any document reasonably necessary or advisable to accomplish the purposes of this assignment, including the papers identified in part (ii) in my name where permitted by law; (iv) to communicate to Assign representatives and agents, all facts known to me relating to said Patent Rights and the history there everything which Assignee, its successors, assigns, representatives or agents shall consider desirable maintaining proper protection for said Patent Rights and for vesting title to said Patent Rights in Assignee,	Patent Rights when requested nat I appoint Assignee (acting rith the interest in the Patent ocument which Assignee may execution and filing of the nee, its successors, assigns, eof; and (v) to generally do for aiding in securing and its successors and assigns.
ASSIGNEE: Verizon Patent and Licensing Inc., a Delaware Corporation with a place of business at One Verizon Way, Basking Ridge, NJ 07920 US IN WITNESS to my agreement to the foregoing Declaration of Inventor and Inventor Assignment Acknowledgement, I have executed as set forth below: Full legal name of Inventor: Sanjay Ravindra Ranade	C. I covenant with Assignee, its successors and assigns, that no assignment, grant, mortgage, license, the Patent Rights has been made to others by me, and that full right to convey the same as set forth herein it	or other agreement affecting is possessed by me.
Full legal name of Inventor: Sanjay Ravindra Ranade	ASSIGNEE: Verizon Patent and Licensing Inc., a Delaware Corporation with a place of business.	
	IN WITNESS to my agreement to the foregoing Declaration of Inventor and Inventor Assignment Acknow as set forth below:	ledgement, I have executed
	Full legal name of Inventor: Sanjay Ravindra Ranade	
7 T T T T T T T T T T T T T T T T T T T	Address: 512 Santa Fe Trail, Apt 215, Irving, TX 75063	
Ciry me	Cina Me	

PATENT

REEL: 044832 FRAME: 0714

DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

Patent Application Title: END-TO-END NETWORK SERVICE DESIGNER TOOL

the patent application for which: is being filed concurrently herewith, Application Number to be assigned by the USPTO, or was filed on as United States Application Number or PCT International Application Number
Declaration of Inventor
As the below named inventor, I hereby declare that:
 the above-identified application was made or authorized to be made by me; I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-referenced application; and I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.
Inventor Assignment Acknowledgement
For good and valuable consideration, the receipt of which is hereby acknowledged, I agree as follows:
A. I hereby assign to the Verizon legal entity identified below ("Assignee"), including its successors and assigns, my entire worldwide right, title and interest in and to any and all inventions and other ideas described in the above-identified patent application, as well as in and to said application and all divisional, continuing (in whole or in part), substitute, renewal, reissue, provisional or other applications or registrations for Letters Patent which have been or shall be filed in the United States and all foreign countries based on any of said inventions or ideas, or based on or claiming priority to said application; and in and to all original and reissued Letters Patent which have been or shall be issued in the United States and foreign countries from any of said applications or registrations; and in and to all rights of priority resulting from the filing of any of said applications or registrations (all collectively, the "Patent Rights"). Letters Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any other form of industrial property recognized under the Paris Convention for the Protection of Industrial Property.
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C. I covenant with Assignee, its successors and assigns, that no assignment, grant, mortgage, license, or other agreement affecting the Patent Rights has been made to others by me, and that full right to convey the same as set forth herein is possessed by me.
ASSIGNEE: Verizon Patent and Licensing Inc., a Delaware Corporation with a place of business at One Verizon Way, Basking Ridge, NJ 07920 US
IN WITNESS to my agreement to the foregoing Declaration of Inventor and Inventor Assignment Acknowledgement, I have executed as set forth below:
Full legal name of Inventor: Chetan B. Gopal
Address: 102 Canton Terrace, Westwood, MA 02090
01/03/2018

PATENT REEL: 044832 FRAME: 0715

1

DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

Patent Application Title: END-TO-END NETWORK SERVICE DESIGNER TOOL

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As the below named inventor, I hereby declare that:
 the above-identified application was made or authorized to be made by me; I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-referenced application; and I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.
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ASSIGNEE: Verizon Patent and Licensing Inc., a Delaware Corporation with a place of business at One Verizon Way, Basking Ridge, NJ 07920 US
IN WITNESS to my agreement to the foregoing Declaration of Inventor and Inventor Assignment Acknowledgement, I have executed as set forth below:
Full legal name of Inventor: Amit Kapoor
Address: 22835 Glacier Lily Drive, Clarksburg, MD 20871
Signature: Date: 1/9/2018

PATENT REEL: 044832 FRAME: 0716

1

DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

Patent Application Title: END-TO-END NETWORK SERVICE DESIGNER TOOL

the patent application for which: is being filed concurrently herewith, Application Number to be assigned by the USPTO, or was filed on as United States Application Number or PCT International Application Number
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As the below named inventor, I hereby declare that:
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Inventor Assignment Acknowledgement
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C. I covenant with Assignee, its successors and assigns, that no assignment, grant, mortgage, license, or other agreement affecting the Patent Rights has been made to others by me, and that full right to convey the same as set forth herein is possessed by me.
ASSIGNEE: Verizon Patent and Licensing Inc., a Delaware Corporation with a place of business at One Verizon Way, Basking Ridge, NJ 07920 US
IN WITNESS to my agreement to the foregoing Declaration of Inventor and Inventor Assignment Acknowledgement, I have executed as set forth below:
Full legal name of Inventor: Viraj Parekh
Address: 37 Canal View Drive, Lawrenceville, NJ 08648
Signature:Viraj Parekh

PATENT REEL: 044832 FRAME: 0717

1

DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

Patent Application Title: <u>END-TO-END NETWORK SERVICE DESIGNER TOOL</u>

the patent application for which:

is being filed concurrently herewith, Application Number to be assigned by the USPTO, or
was filed on ______ as United States Application Number _____ or PCT International Application Number______.

Declaration of Inventor

As the below named inventor, I hereby declare that:

- * the above-identified application was made or authorized to be made by me;
- I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-referenced application; and
- I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

Inventor Assignment Acknowledgement

For good and valuable consideration, the receipt of which is hereby acknowledged, I agree as follows:

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- C. I covenant with Assignee, its successors and assigns, that no assignment, grant, mortgage, license, or other agreement affecting the Patent Rights has been made to others by me, and that full right to convey the same as set forth herein is possessed by me.

ASSIGNEE: Verizon Patent and Licensing Inc., a Delaware Corporation with a place of business at One Verizon Way, Basking Ridge, NJ 07920 US

IN WITNESS to my agreement to the foregoing Declaration of Inventor and Inventor Assignment Acknowledgement, I have executed as set forth below:

Full legal name of Inventor: Shrinath Kuppa

Address: H No. 8/204, Gowri Sankara puram, Gudivada 521301, Andhra Pradesh, India

Signature: Shimath Date: 03-Jan-2018

PATENT REEL: 044832 FRAME: 0718 1

RECORDED: 02/05/2018