## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4487047

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
MING CHEN	06/27/2017
PRAMOD KALYANASUNDARAM	06/30/2016
JIANXIU HAO	06/27/2017
DAHAI REN	06/28/2017

### **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:	15639257

#### **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

SNYDER, CLARK, LESCH & CHUNG, LLP **Correspondent Name:** 

950 HERNDON PARKWAY Address Line 1:

**SUITE 365** Address Line 2:

Address Line 4: HERNDON, VIRGINIA 20170

ATTORNEY DOCKET NUMBER:	20160991
NAME OF SUBMITTER:	JOHN A. VOISINET
SIGNATURE:	/John A. Voisinet, Reg. No. 67,437/
DATE SIGNED:	06/30/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

**Total Attachments: 4** 

**PATENT REEL: 042876 FRAME: 0618** 

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> PATENT REEL: 042876 FRAME: 0619

VZ Docket No.: 20160991

### **DECLARATION AND ASSIGNMENT** FOR PATENT APPLICATION

# Patent Application Title: SCALABLE AND SECURE VEHICLE TO EVERYTHING COMMUNICATIONS

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:
<ul> <li>the above-identified application was made or authorized to be made by me;</li> <li>I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-referenced application; and</li> <li>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.</li> </ul>
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: Ming Chen
Address: 9 Meeting House Circle, Bedford, MA 91730
Signature: Date: Date:

**PATENT** 

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**REEL: 042876 FRAME: 0620** 

VZ Docket No.: 20160991

### DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

# Patent Application Title: SCALABLE AND SECURE VEHICLE TO EVERYTHING COMMUNICATIONS

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
Number
Declaration of Inventor
As the below named inventor, I hereby declare that:
<ul> <li>the above-identified application was made or authorized to be made by me;</li> <li>I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-referenced application; and</li> <li>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.</li> </ul>
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 deeverything 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: Pramod Kalyanasundaram
Address: 7 Maddy Lane, Acton, MA 01720
Signature: X Prance Date: 6/30/2017

**PATENT** REEL: 042876 FRAME: 0621

VZ Docket No.: 20160991

#### DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

# Patent Application Title: SCALABLE AND SECURE VEHICLE TO EVERYTHING COMMUNICATIONS

the patent applic	ation for which: concurrently herewith, Application Number to be assigned by the USPTO, or
was filed on Number	as United States Application Number or PCT International Application
7700750	
	Declaration of Inventor
As the below named inve	ntor, I hereby declare that:
<ul> <li>I believe that I a application; and</li> <li>I hereby acknow</li> </ul>	fied application was made or authorized to be made by me; m the original inventor or an original joint inventor of a claimed invention in the above-referenced ledge 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 co	nsideration, the receipt of which is hereby acknowledged, I agree as follows:
worldwide right, title and as well as in and to said other applications or reg- based on any of said invi- Letters Patent which ha registrations; and in and t "Patent Rights"). Letters	the Verizon legal entity identified below ("Assignee"), including its successors and assigns, my entire interest in and to any and all inventions and other ideas described in the above-identified patent application, application and all divisional, continuing (in whole or in part), substitute, renewal, reissue, provisional or strations for Letters Patent which have been or shall be filed in the United States and all foreign countries entions or ideas, or based on or claiming priority to said application; and in and to all original and reissued we been or shall be issued in the United States and foreign countries from any of said applications or o all rights of priority resulting from the filing of any of said applications or registrations (all collectively, the Patent as used herein shall include, without limitation, patents, utility models, industrial designs, and any roperty recognized under the Paris Convention for the Protection of Industrial Property.
execute all rightful oaths by Assignee (or its succe through its representative Rights, with full authority deem reasonably necessary papers identified in par representatives and agen everything which Assign maintaining proper protect	ignee may apply for and receive Letters Patent based on the Patent Rights in its own name; (ii) that I will declarations, assignments, powers of attorney and other papers related to the Patent Rights when requested assors and/or assigns) without compensation (but at Assignee's expense),; (iii) that I appoint Assignee (acting its) as my attorney-in-fact, such appointment being irrevocable and coupled with the interest in the Patent of in my place and stead and in my name to take any action and to execute any document which Assignee may arry or advisable to accomplish the purposes of this assignment, including the execution and filing of the I (ii) in my name where permitted by law; (iv) to communicate to Assignee, its successors, assigns, its, all facts known to me relating to said Patent Rights and the history thereof; and (v) to generally do nee, its successors, assigns, representatives or agents shall consider desirable for aiding in securing and axion for said Patent Rights and for vesting title to said Patent Rights in Assignee, its successors and assigns.
C. I covenant with As- the Patent Rights has been	signee, its successors and assigns, that no assignment, grant, mortgage, license, or other agreement affecting made to others by me, and that full right to convey the same as set forth herein is possessed by me.
ASSIGNEE: V	erizon 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 agre as set forth below:	ement to the foregoing Declaration of Inventor and Inventor Assignment Acknowledgement, I have executed
Full legal name of Invent	or; Jianxiu Hao
Address: 17 Wyndcliff D	0/2/117
1.	At a 9— Date:

Full legal name of Inventor: Dahai Ren

**RECORDED: 06/30/2017** 

Address: 8 Boyce Farm Road, Lincoln, MA 01773

VZ Docket No.: 20160991

### DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

Patent Application Title: SCALABLE AND SECURE VEHICLE TO EVERYTHING COMMUNICATIONS

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	
<u>Declaration of Inventor</u>	
As the below named inventor, I hereby declare that:	
<ul> <li>the above-identified application was made or authorized to be made by me;</li> <li>I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-referenced application; and</li> </ul>	
<ul> <li>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.</li> </ul>	
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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IN WITNESS to my agreement to the foregoing Declaration of Inventor and Inventor Assignment Acknowledgement, I have executed as set forth below:	

Pate: 6.28.2017

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