### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6144392

re	Corrective Assignment to correct the JEFFREY R. FOERSTER previously recorded on Reel 046902 Frame 0318. Assignor(s) hereby confirms the JEFFERY R. FOERSTER.

#### **CONVEYING PARTY DATA**

Name	Execution Date
STEFAN FECHTEL	07/23/2018
KILIAN ROTH	07/19/2018
BERTRAM GUNZELMANN	07/19/2018
MARKUS DOMINIK MUECK	07/19/2018
INGOLF KARLS	07/19/2018
ZHIBIN YU	08/02/2018
THORSTEN CLEVORN	07/19/2018
NAGEEN HIMAYAT	07/18/2018
DAVE A CAVALCANTI	07/18/2018
ANA LUCIA PINHEIRO	07/18/2018
BAHAREH SADEGHI	07/25/2018
HASSNAA MOUSTAFA	07/18/2018
MARCIO ROGERIO JULIATO	07/19/2018
RAFAEL MISOCZKI	07/19/2018
EMILY H QI	07/25/2018
JEFFREY R FOERSTER	07/19/2018
DUNCAN KITCHIN	08/17/2018
DEBDEEP CHATTERJEE	07/23/2018
JONG-KAE FWU	07/18/2018
CARLOS ALDANA	08/12/2018
SHILPA TALWAR	08/13/2018
HARRY G SKINNER	08/06/2018
DEBABANI CHOUDHURY	08/17/2018

#### **RECEIVING PARTY DATA**

Name:	INTEL CORPORATION
Street Address:	2200 MISSION COLLEGE BLVD.
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95054

PATENT

506097671 REEL: 053831 FRAME: 0429

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
PCT Number:	US2018039941

#### **CORRESPONDENCE DATA**

Fax Number:

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:** 612-373-6900 **Email:** request@slwip.com

Correspondent Name: SCHWEGMAN, LUNDBERG & WOESSNER/INTEL

Address Line 1: PO BOX 2938

Address Line 4: MINNEAPOLIS, MINNESOTA 55402

ATTORNEY DOCKET NUMBER:	1884.417WO1
NAME OF SUBMITTER:	NANCY CUNDALL
SIGNATURE:	/Nancy Cundall/
DATE SIGNED:	06/09/2020

#### **Total Attachments: 83**

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# RECORDATION FORM COVER SHEET PATENTS ONLY

Atty Ref/Docket No.: (P119349-PCT) 1884.417WO1 Patent and Trademark Office To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.

DO NOT USE THIS SPACE		
concerning document should be mailed:  Name: Ognyan I. Beremski  Address: Schwegman Lundberg & Woessner, P.A. P.O. Box 2938 Minneapolis, Minnesota 55402	<ul> <li>7. Total fee (37 CFR 3.41):\$ 0.00</li> <li>[]Enclosed</li> <li>[]Authorized to be charged to deposit account 190743</li> <li>8. Please charge any additional fees or credit any over payments to our Deposit Account No.: 190743</li> </ul>	
5. Name and address of party to whom correspondence	6. Total number of applications and patents involved: 1	
Additional numbers attached? [ ]Yes [X]No		
Serial No. PCT/US2018/039941		
A. Patent Application No.(s)	B. Patent No.(s)	
If this document is being filed together with a new application, the	ne execution date of the application is:	
4. Application number(s) or patent number(s):		
Execution Date: July 23, 2018, July 19, 2018, August 2, 2018, July 19, 2018, July 18, 2018, July 18, 2018, July 25, 2018, July 18, 2018, July 19, 2018, July 19, 2018, July 19, 2018, July 25, 2018, July 19, 2018, August 17, 2018, July 23, 2018, July 18, 2018, August 12, 2018, August 13, 2018, August 6, 2018, August 17, 2018		
[ ] Assignment [ ] Merger [ ] Security Agreement [ ] Change of Name [X] Other - Corrected Assignment - Jeffrey R. Foerster		
3. Nature of conveyance:		
[ ]Yes [X]No		
Additional name(s) of conveying party(ies) attached?		
Stefan Fechtel, Kilian Roth, Bertram Gunzelmann, Markus Dominik Mueck, Ingolf Karls, Zhibin Yu, Thorsten Clevorn, Nageen Himayat, Dave A. Cavalcanti, Ana Lucia Pinheiro, Bahareh Sadeghi, Hassnaa Moustafa, Marcio Rogerio Juliato, Rafael Misoczki, Emily H. Qi, Jeffrey R. Foerster, Duncan Kitchin, Debdeep Chatterjee, Jong-Kae Fwu, Carlos Aldana, Shilpa Talwar, Harry G. Skinner, Debabani Choudhury	Street Address: 2200 Mission College Blvd.  City: Santa Clara State: CA Zip: 95054 Country: United States of America  Additional name(s) & address(es) attached? [ ]Yes [X]No	
Name of conveying party(ies):  Staffer Facility Bath, Party Consultation Mades	<ol> <li>Name and address of receiving party(ies):</li> <li>Name: Intel Corporation</li> </ol>	

9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Ognvan I. Beremski/Reg. No. 51,458	/Ognyan I. Beremski/	05-JUN-2020
Name of Person Signing	Signature	Date
	Total number of pages in	cluding cover sheet: 83

Mail documents to be recorded with required cover sheet information to: **Commissioner of Patents and Trademarks** Mail Stop Assignment Recordation Services P.O. Box 1450 Alexandria, VA 22313-1450

#### 505056546 08/22/2018

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5103301

NATURE OF CONVEYANCE: ASSIGNMENT  CONVEYING PARTY DATA  Name  STEFAN FECHTEL  KILIAN ROTH  BERTRAM GUNZELMANN	07/23/2018 07/19/2018
Name STEFAN FECHTEL KILIAN ROTH BERTRAM GUNZELMANN	07/23/2018 07/19/2018
STEFAN FECHTEL KILIAN ROTH BERTRAM GUNZELMANN	07/23/2018 07/19/2018
KILIAN ROTH BERTRAM GUNZELMANN	07/19/2018
BERTRAM GUNZELMANN	
AAAAAAAAAA	07/10/0010
NA COLONO CONTRACTOR AND COLO	07/19/2018
MARKUS DOMINIK MUECK	07/19/2018
INGOLF KARLS	07/19/2018
ZHIBIN YU	08/02/2018
THORSTEN CLEVORN	07/19/2018
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CARLOS ALDANA	08/12/2018
SHILPA TALWAR	08/13/2018
HARRY G SKINNER	08/06/2018
DEBABANI CHOUDHURY	08/17/2018
RECEIVING PARTY DATA	
Name: INTEL CORPORATION	
Street Address: 2200 MISSION COLLEGE BLVD.	
City: SANTA CLARA	
State/Country: CALIFORNIA	
Postal Code: 95054	

## <u>ASSIGNMENT</u>

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned inventor(s):

<Stefan Fechtel, Kilian Roth, Bertram Gunzelmann, Markus Dominik Mueck, Ingolf Karls, Zhibin Yu, Thorsten Clevorn, Nageen Himayat, Dave A. Cavalcanti, Ana Lucia Pinheiro, Bahareh Sadeghi, Hassnaa Moustafa, Marcio Rogerio Juliato, Rafael Misoczki, Emily H. Qi, Jeffery R. Foerster, Duncan Kitchin, Debdeep Chatterjee, Jong-Kae Fwu, Carlos Aldana, Shilpa Talwar, Harry G. Skinner, Debabani Choudhury>

hereby sell, assign, and transfer to:

#### **Intel Corporation**

a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

# V2X COMMUNICATIONS USING MULTIPLE RADIO ACCESS TECHNOLOGIES (MULTI-RAT)

(I hereby authorize and request any attorney having appropriate authority from the assignee to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on June 28, 2018 as

PCT Application Number PCT/US2018/039941

which has been executed by the undersigned prior hereto or concurrently herewith on the date(s) indicated below,

and in and to said application and all Additional Applications, and all other patent applications that have been or shall be filed in the United States and all other countries and international filing offices on any of said inventions and improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all other countries and international filing offices on said inventions and improvements; and in and to all rights of priority resulting from the filing of said applications; as used herein "Additional Applications" includes but is not limited to design, utility, utility model, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and national phase applications on said inventions and improvements;

Page 1 of 4

and agree that said Assignee may apply for and receive a patent or patents for said inventions and improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all Additional Applications, and all other patent applications on any and all said inventions and improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof, and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that fall right to convey the same as herein expressed is possessed by the undersigned.

49.93.00 Stefan Fechtel	July <u>23, 2018</u> Date Signed
	Date Signed
Kilian Roth	Date Signed
Bertram Gunzelmann	Date Signed
Markus Dominik Mueck	Date Signed
Ingolf Karls	Date Signed
Zhibin Yu	Date Signed

Page 2 of 4

Thorsten Clevorn  Date Signed  Nageen Himayat  Date Signed  Dave A. Cavalcanti  Date Signed  Ana Lucia Pinheiro  Date Signed  Bahareh Sadeghi  Date Signed  Hassnaa Moustafa  Date Signed  Marcio Rogerio Juliato  Date Signed  Rafael Misoczki  Date Signed  Emily H. Qi  Date Signed  Date Signed  Date Signed		
Dave A. Cavalcanti  Date Signed  Ana Lucia Pinheiro  Date Signed  Bahareh Sadeghi  Date Signed  Hassnaa Moustafa  Date Signed  Marcio Rogerio Juliato  Date Signed  Rafael Misoczki  Date Signed  Emily H. Qi  Date Signed  Jeffery R. Foerster  Date Signed	Thorsten Clevorn	Date Signed
Ana Lucia Pinheiro Date Signed  Bahareh Sadeghi Date Signed  Hassnaa Moustafa Date Signed  Marcio Rogerio Juliato Date Signed  Rafael Misoczki Date Signed  Emily H. Qi Date Signed  Jeffery R. Foerster Date Signed	Nageen Himay at	Date Signed
Bahareh Sadeghi Date Signed  Hassnaa Moustafa Date Signed  Marcio Rogerio Juliato Date Signed  Rafael Misoczki Date Signed  Emily H. Qi Date Signed  Jeffery R. Foerster Date Signed	Dave A. Cavalcanti	Date Signed
Hassnaa Moustafa Date Signed  Marcio Rogerio Juliato Date Signed  Rafael Misoczki Date Signed  Emily H. Qi Date Signed  Jeffery R. Foerster Date Signed	Ana Lucia Pinheiro	Date Signed
Marcio Rogerio Juliato Date Signed  Rafael Misoczki Date Signed  Emily H. Qi Date Signed  Jeffery R. Foerster Date Signed	Bahareh Sadeghi	Date Signed
Rafael Misoczki Date Signed  Emily H. Qi Date Signed  Jeffery R. Foerster Date Signed	Hassnaa Moustafa	Date Signed
Emily H. Qi Date Signed  Jeffery R. Foerster Date Signed	Marcio Rogerio Juliato	Date Signed
Jeffery R. Foerster Date Signed	Rafael Misoczki	Date Signed
	Emily H. Qi	Date Signed
Duncan Kitchin Date Signed	Jeffery R. Foerster	Date Signed
	Duncan Kitchin	Date Signed

Debdeep Chatterjee	Date Signed
Jong-Kae Fwu	Date Signed
Carlos Aldana	Date Signed
Shilpa Talwar	Date Signed
Harry G. Skinner	Date Signed
Debabani Choudhury	Date Signed

## <u>ASSIGNMENT</u>

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned inventor(s):

Stefan Fechtel, Kilian Roth, Bertram Gunzelmann, Markus Dominik Mueck, Ingolf Karls, Zhibin Yu, Thorsten Clevorn, Nageen Himayat, Dave A. Cavalcanti, Ana Lucia Pinheiro, Bahareh Sadeghi, Hassnaa Moustafa, Marcio Rogerio Juliato, Rafael Misoczki, Emily H. Qi, Jeffery R. Foerster, Duncan Kitchin, Debdeep Chatterjee, Jong-Kae Fwu, Carlos Aldana, Shilpa Talwar, Harry G. Skinner, Debabani Choudhury>

hereby sell, assign, and transfer to:

### Intel Corporation

a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

# V2X COMMUNICATIONS USING MULTIPLE RADIO ACCESS TECHNOLOGIES (MULTI-RAT)

(I hereby authorize and request any attorney having appropriate authority from the assignce to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on June 28, 2018 as

PCT Application Number PCT/US2018/039941

which has been executed by the undersigned prior hereto or concurrently herewith on the date(s) indicated below,

and in and to said application and all Additional Applications, and all other patent applications that have been or shall be filed in the United States and all other countries and international filing offices on any of said inventions and improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all other countries and international filing offices on said inventions and improvements; and in and to all rights of priority resulting from the filing of said applications; as used herein "Additional Applications" includes but is not limited to design, utility, utility model, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and national phase applications on said inventions and improvements;

and agree that said Assignee may apply for and receive a patent or patents for said inventions and improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all Additional Applications, and all other patent applications on any and all said inventions and improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof, and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Stefan Fechtel	Date Signed
K. Rott	<u> </u>
Kilian Roth	Date Signed
Bertram Gunzelmann	Date Signed
Manufacture of Manufacture of the Samuel of	15 July 201
Markus Dominik Mueck	U Duly 20. Date Signed
	2018/07/11:
Ingolf Karls	Date Signed
Zhibin Yu	Date Signed

Thorsten Clevorn	Date Signed
Nageen Himayat	Date Signed
Dave A. Cavalcanti	Date Signed
Ana Lucia Pinheiro	Date Signed
Bahareh Sadeghi	Date Signed
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Shilpa Talwar	Date Signed
Harry G. Skinner	Date Signed
Debabani Choudhury	Date Signed

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a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

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covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Stefan Fechtel	Date Signed
Kilian Roth	Date Signed
Jurelman Bertran	19.7.2018
Bertram Gunzelmann	Date Signed
Markus Dominik Mueck	Date Signed
Ingolf Karls	Date Signed
Zhihin Yu	Date Signed

Thorsten Clevorn	Date Signed
Nageen Himay at	Date Signed
Dave A. Cavalcanti	Date Signed
Ana Lucia Pinheiro	Date Signed
Bahareh Sadeghi	Date Signed
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Stefan Fechtel	Date Signed
Kilian Roth	Date Signed
Bertram Gunzelmann	Date Signed
Markus Dominik Mueck	Date Signed
Ingolf Kayls	Date Signed
11/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1	02/08/2018

Page 2 of 4

Thorsten Clevorn	Date Signed
Nageen Himay at	Date Signed
Dave A. Cavalcanti	Date Signed
Ana Lucia Pinheiro	Date Signed
Bahareh Sadeghi	Date Signed
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I CL	Jul 19, 2018
Thorsten Clevorn	Date Signed
Nageen Himayat	Date Signed
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Bahareh Sadeghi	Date Signed
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Ana Lucía Pinheiro	Date Signed
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Zhibin Yu	Date Signed

Thorsten Clevorn	Date Signed
Nageen Himayat	Date Signed
Dave A. Cavalcanti	Date Signed
Ana Lucia Pinheiro	Date Signed
Bahareh Sadeghi	 Date Signed
Hassnaa Moustafa	Date Signed
	July 19 2018 Date Signed
Marcio Rogario Juliato	Date Signed
Reful My/.	07/19/2018
Rafael Misoczki	Date Signed
Emily H. Qi	Date Signed
Jeffery R. Foerster	Date Signed
Duncan Kitchin	Date Signed

Debdeep Chatterjee	Date Signed
Jong-Kae Fwu	Date Signed
Carlos Aldana	Date Signed
Shilpa Talwar	Date Signed
Harry G. Skinner	Date Signed
* 	
Debabani Choudhury	Date Signed

### <u>ASSIGNMENT</u>

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned inventor(s):

<Stefan Fechtel, Kilian Roth, Bertram Gunzelmann, Markus Dominik Mueck, Ingolf Karls, Zhibin Yu, Thorsten Clevorn, Nageen Himayat, Dave A. Cavalcanti, Ana Lucia Pinheiro, Bahareh Sadeghi, Hassnaa Moustafa, Marcio Rogerio Juliato, Rafael Misoczki, Emily H. Qi, Jeffery R. Foerster, Duncan Kitchin, Debdeep Chatterjee, Jong-Kae Fwu, Carlos Aldana, Shilpa Talwar, Harry G. Skinner, Debabani Choudhury>

hereby sell, assign, and transfer to:

#### **Intel Corporation**

a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

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Stefan Fechtel	Date Signed
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Bahareh Sadeghi	Date Signed
Hassnaa Moustafa	Date Signed
Marcio Rogerio Juliato	Date Signed
Rafael Misoczki  Zmy How	Date Signed 7/25/2018
Emily H. Qi	Date Signed
Jeffery R. Foerster	Date Signed
Duncan Kitchin	Date Signed

Debdeep Chatterjee	Date Signed
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5/14/2029/1.

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,	Rafael Misoczki	Date Signed
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5/14/2020 /4	. Jeffrey  Duncan Kitchin	Date Signed

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Bertram Gunzelmann	Date Signed
Markus Dominik Mueck	Date Signed
ingolf Karls	Date Signed
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WP WW	14617 2018
Duncan Kitchin	Date Signed

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Emily H. Qi	Date Signed
Jeffery R. Foerster	Date Signed
Duncan Kitchin	Date Signed

Debdeep Chatterjee	07/23/2018
Debdeep Chatterjee	Date Signed
Jong-Kae Fwu	Date Signed
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Debdeep Chatterjee	Date Signed
Jozka T	07/18/2018
Jong-Kae Fwu	Date Signed
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Intel Docket No.: P119349-PCT SLW Reference No.: 1884.417W01

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Dave A. Cavalcanti	Date Signed
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Duncan Kitchin	Date Signed

Debdeep Chatterjee	Date Signed
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Carlos Aldana	8/12/2018 Date Signed
Caros Argana	Date Signed
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hereby sell, assign, and transfer to:

#### Intel Corporation

a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

# V2X COMMUNICATIONS USING MULTIPLE RADIO ACCESS TECHNOLOGIES (MULTI-RAT)

(I hereby authorize and request any attorney having appropriate authority from the assignee to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on June 28, 2018 as

PCT Application Number PCT/US2018/039941

which has been executed by the undersigned prior hereto or concurrently herewith on the date(s) indicated below.

and in and to said application and all Additional Applications, and all other patent applications that have been or shall be filled in the United States and all other countries and international filing offices on any of said inventions and improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all other countries and international filing offices on said inventions and improvements; and in and to all rights of priority resulting from the filing of said applications; as used herein "Additional Applications" includes but is not limited to design, utility, utility model, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and national phase applications on said inventions and improvements;

Page 1 of 4

PATENT REEL: 053831 FRAME: 0508 and agree that said Assignee may apply for and receive a patent or patents for said inventions and improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good kith the intent and purpose of this Assignment, the undersigned will execute all Additional Applications, and all other patent applications on any and all said inventions and improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof, and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Stefan Fechtel	Date Signed
Kilian Roth	Date Signed
Bertram Gunzelmann	Date Signed
Markus Dominik Mueck	Date Signed
Ingolf Karls	Date Signed
Zhibin Yu	Date Signed

Page 2 of 4

### Intel Docket No.: P119349-PCT SLW Reference No.: 1884,417W01

Thorsten Clevorn	Date Signed
Nageen Himayat	Date Signed
Dave A. Cavalcantí	Date Signed
Ana Lucia Pinheiro	Date Signed
Bahareh Sadeghi	Date Signed
Hassnaa Moustafa	Date Signed
Marcio Rogerio Juliato	Date Signed
Rafael Misoczki	Date Signed
Emily H. Qi	Date Signed
Jeffery R. Foerster	Date Signed
Duncan Kitchin	Date Signed

***************************************	
Debdeep Chatterjee	Date Signed
Jong-Kae Fwu	Date Signed
Carlos Aldana	Date Signed
Shilpa Talwar	Date Signed
Mary & Ski	8/6/2018
Harry G. Skinner	Date Signed
Debabani Choudhury	Date Signed

Intel Docket No.: P119349-PCT SLW Reference No.: 1884.417W01

## **ASSIGNMENT**

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned inventor(s):

<Stefan Fechtel, Kilian Roth, Bertram Gunzelmann, Markus Dominik Mueck, Ingolf Karls, Zhibin Yu, Thorsten Clevorn, Nageen Himayat, Dave A. Cavalcanti, Ana Lucia Pinheiro, Bahareh Sadeghi, Hassnaa Moustafa, Marcio Rogerio Juliato, Rafael Misoczki, Emily H. Qi, Jeffery R. Foerster, Duncan Kitchin, Debdeep Chatterjee, Jong-Kae Fwu, Carlos Aldana, Shilpa Talwar, Harry G. Skinner, Debabani Choudhury>

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Page 1 of 4

PATENT REEL: 053831 FRAME: 0512

Intel Docket No.: P119349-PCT SLW Reference No.: 1884.417W01

and agree that said Assignee may apply for and receive a patent or patents for said inventions and improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all Additional Applications, and all other patent applications on any and all said inventions and improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof, and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

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Carlos Aldana	Date Signed
Shilpa Talwar	Date Signed
Harry G. Skinner	Date Signed
Subabani Chondhy Debabani Choudbury	Aug. 17, 2018 Date Signed