507169190 03/09/2022

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7216036

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YOSHIHARU DOI	10/15/2019
JOHN KENNEY	10/11/2019
GAURAV BANSAL	10/08/2019
HONGSHENG LU	10/04/2019
TAKAYUKI SHIMIZU	10/04/2019
ROGER MELEN	10/04/2019
ONUR ALTINTAS	10/04/2019

RECEIVING PARTY DATA

Name:	TOYOTA JIDOSHA KABUSHIKI KAISHA
Street Address:	1, TOYOTA-CHO
City:	TOYOTA-SHI, AICHI-KEN
State/Country:	JAPAN
Postal Code:	471-8571

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16122869

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.

Email: paralegal@burbagelaw.com

Correspondent Name: BURBAGE LAW, P.C.

Address Line 1: P.O. BOX 3607

Address Line 4: PAWLEYS ISLAND, SOUTH CAROLINA 29585

ATTORNEY DOCKET NUMBER:	T1834.10232US01
NAME OF SUBMITTER:	KATHERINE D. GARDNER
SIGNATURE:	/Katherine D. Gardner/
DATE SIGNED:	03/09/2022

Total Attachments: 7

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source=IPA3469_183410232US01_Declaration_Assignment_Kenney_SIGNED#page1.tif
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source=IPA3469_183410232US01_Declaration_Assignment_Shimizu_signed#page1.tif
source=IPA3469_183410232US01_Declaration_Assignment_Melen_SIGNED#page1.tif
source=IPA3469_183410232US01_Declaration_Assignment_Altintas_SIGNED#page1.tif

ASSIGNMENT

Inventor Name	Yoshibaru Doi
	In consideration of my ongoing employment and other good and valuable consideration paid to each of the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to
Name of Assignee	TOYOTA JIDOSHA KABUSHIKI KAISHA
Address of Assignee	1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 Japan
	(hereinafter designated as the Assignec) and Assignec's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. § 100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as
Identification such as	SIMULTANEOUS RECEPTION OF VEHICLE-TO-EVERYTHING (VZX) MESSAGE OVER
Title, Case Number, or Foreign Application	MULTIPLE CHANNELS IN MULTI-CHANNEL V2X NETWORKS
Number	(Attorney Docket No. T1834.18232US0)), filled on even date berewith or as
Alternative	U.S. Application Number 16/122,869
Edentification for	
filed applications	filed September 5, 2018
declared concerning any application of and going forward with such interfere. 1) Each undersigned agrees clause or provisions of the Internation 4) Each undersigned agrees reexamination a grant of a valid Unite. 5) Each undersigned author resulting from said application(s) to 4 entire interest herein assigned, and the this assignment is binding on Assigned 6) Each undersigned hereby	to execute all papers and documents and perform any act which may be necessary in connection with nat Convention for Protection of Industrial Property or similar agreements. to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or
Declaration	
As an above named inventor, I hereby	declare that:
I believe I am the original inve- which this declaration is being submitted	intor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for d.
The application was made or a	nthorized to be made by me.
	d the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the emetrial to patentability as defined in 37 CPR §1.56.
I hereby acknowledge that a imprisonment of not more than five (ny willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or i) years, or both.
. In witness whereof, execut	ed by the undersigned on the date(s) apposite the undersigned name(s).

ASSIGNMENT (BEING FILED FOR DUAL PURPOSE UNDER 37 CFR L63(e))

For Application with Filing Date on or after September 16, 2012

ASSIGNMENT

Title, Case Number, or	Inventor Name	John Kenney
Address of Assignce 1, Toyota-cho, Toyota-chi, Aschi-ken, 471-8571 Japan (hereinather designated as the Assignce) and Assignce's bein, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. \$100, in the invention, and in all applications for patent including any and all provisional morphovisional discional continuation, international, substitute and ressue application(s), and all Letters Patent, extensions, ressues and recommission certificates that may be granted on the invention known as Identification such as: SIMULTANSOUS RECEPTION OF VEHICLE TO EVERYTHING (V2X) MESSAGE OVER THIs, Case Number, or		undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agrees to
Chereinafter designated as the Assignee's and Assignee's heirs, successors, assigns and legal representatives, the emire right, title and interest for the United States of America as defined in 35 U.S.C. § 100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional communition, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as **Identification such as Title, Case Number, or ** **SIMULTANEOUS RECEPTION OF VEHICLE-TO-EVERYTHING (V2X) MESSAGE OVER TITLe, Case Number, or ** **Identification such as Titl	Name of Assignce	TOYOTA JIDOSHA KABUSHIKI KAISHA
the entire right, title and interest for the United States of America as defined in 35 U.S.C. § 100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and ressue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as Identification such as SIMULTANEOUS RECEPTION OF VEHICLE-TO-EVERYTHING (V2X) MESSAGE OVER Title, Case Number, or	Address of Assignee	1. Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 Japan
Title, Case Number, or Supplemental State Control of Co		the entire right, ritle and interest for the United States of America as defined in 35 U.S.C. § 100, in the invention, and in all applications for patent including any and all provisional, non-provisional, discremal continuation, international, substitute and resource applications s, and all Letters Patent, extensions, resource
		SIMULTANEOUS RECEPTION OF VEHICLE-TO-EVERYTHING (VZX) MESSAGE OVER
Foreign Application MULTIPLE CHANNELS IN MULTI-CHANNEL V2X NETWORKS		MULTIPLE CHANNELS IN MULTI-CHANNEL V2X NETWORKS
Number (Attorney Docket No. T1834.10232US01), filed on even date herewith or as		(Attorney Docket No T1834 10232US01), filed on even date berewith or as
Afternative U.S. Application Number 16/122,869 Identification for		U.S. Application Number 16/122,869
filed applications filed September 5, 2018	filed applications	filed September 5, 2018

 Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.

 Each underlighed agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning any application or patent for the invention and to cooperate with the Assignce in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.

Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with

claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or continu by reissue or

reexamination a grant of a valid United States patent to the Assignee.

 Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all patents resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he or she has full right to convey the entry integral began assigned, and that he or she has not executed, and will not execute, any agreemently) in conflict herewith, and agrees that this georganizat is building on Assignor and Assignor's hours, successors, assigns and legal representatives,

6) Each undersigned hereby grants the firm of BURBAGE LAW PC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this

document.

Declaration

As an above osmed inventor. Thereby declare that

believe I am the original investor or an original joint investor of a claimed investion (or claimed design) in the above-destified application for which this declaration is being submitted.

The application was made or authorized to be made by me.

I have reviewed and understand the contents of the above identified application, including the claims, and am aware of the duty to discusse to the Office all information known to me to be material to paramability as defined in 37 CFR §1.56

Thereby acknowledge that any willful false statement made in this declaration is pumphable under 18 U.S.C. 1001 by fine or improvement of not more than five (5) years, or both

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

October

Inventor Signature 2 PATENT

REEL: 059213 FRAME: 0913

ASSIGNMENT

Inventor Name	Gaurav Bansal
	In consideration of my ongoing employment and other good and valuable consideration paid to each of the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to
Name of Assignee	TOYOTA JIDOSHA KABUSHIKI KAISHA
Address of Assignee	1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 Japan
	(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as
Identification such as Title, Case Number, or	SIMULTANEOUS RECEPTION OF VEHICLE-TO-EVERYTHING (V2X) MESSAGE OVER
Foreign Application Number	MULTIPLE CHANNELS IN MULTI-CHANNEL V2X NETWORKS
. Valley	(Attorney Docket No. T1834.10232US01), filed on even date herewith or as
Alternative	U.S. Application Number 16/122,869
Identification for	
filed applications	filed September 5, 2018 to execute all papers necessary in connection with any application and/or patent for the invention and also
declared concerning any application of and going forward with such interfere 3) Each undersigned agrees claims or provisions of the Internation 4) Each undersigned agrees reexamination a grant of a valid Unite 5) Each undersigned author resulting from said application(s) to the entire interest herein assigned, and that this assignment is binding on Assignon.	to execute all papers and documents and perform any act which may be necessary in connection with all Convention for Protection of Industrial Property or similar agreements. to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or
Declaration	
As an above named inventor, I hereby	declare that:
I believe I am the original inver which this declaration is being submitted	ntor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for
The application was made or au	athorized to be made by me.
I have reviewed and understand	the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the material to patentability as defined in 37 CFR §1.56.
I hereby acknowledge that an	y willful false statement made in this declaration is punishable under to 0.3.6. 1001 by this of
In witness whereof, execute	d by the undersigned on the date(s) opposite the undersigned name(s).
Date 10 8 2	1019 Inventor Signature

ASSIGNMENT

Inventor Name	Hongsheng Lu
	In consideration of my ongoing employment and other good and valuable consideration paid to each of the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to
Name of Assignee	TOYOTA JIDOSHA KABUSHIKI KAISHA
Address of Assignee	1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 Japan
	(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as
Identification such as Title, Case Number, or	SIMULTANEOUS RECEPTION OF VEHICLE-TO-EVERYTHING (V2X) MESSAGE OVER
Foreign Application	MULTIPLE CHANNELS IN MULTI-CHANNEL V2X NETWORKS
Number	(Attorney Docket No. T1834.10232US01), filed on even date herewith or as
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Identification for	
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2) Each undersigned agrees declared concerning any application of and going forward with such interfere 3) Each undersigned agrees claims or provisions of the Internation 4) Each undersigned agrees reexamination a grant of a valid Unite 5) Each undersigned author resulting from said application(s) to the entire interest herein assigned, and that this assignment is binding on Assignoth Each undersigned hereby	to execute all papers and documents and perform any act which may be necessary in connection with nal Convention for Protection of Industrial Property or similar agreements. to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or
Declaration	
As an above named inventor, I hereby	declare that:
I believe I am the original invewhich this declaration is being submitted	entor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for d.
The application was made or a	authorized to be made by me.
	d the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the e material to patentability as defined in $37 \text{ CFR } \$1.56$.
I hereby acknowledge that a imprisonment of not more than five (5	ny willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or 5) years, or both.
In witness whereof, execut	ed by the undersigned on the date(s) opposite the undersigned name(s).
Date 10/04/2019	Inventor Signature Angilary W

Date

ASSIGNMENT

Inventor Name	Takayuki Shimizu
	In consideration of my ongoing employment and other good and valuable consideration paid to each of the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to
Name of Assignee	TOYOTA JIDOSHA KABUSHIKI KAISHA
Address of Assignee	1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 Japan
	(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as
Identification such as Title, Case Number, or	SIMULTANEOUS RECEPTION OF VEHICLE-TO-EVERYTHING (V2X) MESSAGE OVER
Foreign Application Number	MULTIPLE CHANNELS IN MULTI-CHANNEL V2X NETWORKS
114411004	(Attorney Docket NoT1834.10232US01), filed on even date herewith or as
Alternative	U.S. Application Number 16/122,869
Identification for	
filed applications	filed September 5, 2018
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Declaration	dealars that
As an above named inventor, I hereby I believe I am the original invention which this declaration is being submitted	ntor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for
The application was made or at	athorized to be made by me.
	the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the material to patentability as defined in 37 CFR §1.56.
I hereby acknowledge that ar imprisonment of not more than five (5)	by willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or by years, or both.
In witness whereof, execute	d by the undersigned on the date(s) opposite the undersigned name(s).
Date /0/4/2	0/9 Inventor Signature Mayli Benzi

ASSIGNMENT

Inventor Name	Roger Melen
	In consideration of my ongoing employment and other good and valuable consideration paid to each of the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to
Name of Assignee	TOYOTA JIDOSHA KABUSHIKI KAISHA
Address of Assignee	1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 Japan
	(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as
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Foreign Application	MULTIPLE CHANNELS IN MULTI-CHANNEL V2X NETWORKS
Number	(Attorney Docket No. T1834.10232US01), filed on even date herewith or as
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filed applications	filed September 5, 2018
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Declaration

As an above named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

The application was made or authorized to be made by me.

I have reviewed and understand the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR §1.56.

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.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s),

Date October 4, 2019 Inventor Signature Cogn Melle

ASSIGNMENT

Name	Onur Altintas	
	In consideration of my ongoing employment and other good and valuable consideration paid to each of the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to	
Name of Assignee	TOYOTA JIDOSHA KABUSHIKI KAISHA	
Address of Assignee	I, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 Japan	
Identification such as	(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as SIMULTANEOUS RECEPTION OF VEHICLE-TO-EVERYTHING (V2X) MESSAGE OVER	
Title, Case Number, or Foreign Application Number	MULTIPLE CHANNELS IN MULTI-CHANNEL V2X NETWORKS	
	(Attorney Docket No. T1834.10232US01), filed on even date herewith or as	
Alternative	U.S. Application Number 16/122,869	
Identification for filed applications	filed September 5, 2018	
1) Each undersigned agrees	to avacute all papers pacescary in connection with any application and/or patent for the invention and also	

- Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.
- 2) Each undersigned agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning any application or patent for the invention and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.
- 3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
- 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.
- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all patents resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.
- 6) Each undersigned hereby grants the firm of BURBAGE LAW PC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Declaration

Inventor

As an above named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

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In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date October 4, 2019 Inventor Signature

PATENT REEL: 059213 FRAME: 0918

RECORDED: 03/09/2022