505354573 03/01/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5401360

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MARC ANTHONY ISCHE	02/07/2014
AHMAD HATAMI	02/06/2014
ARDALAN HESHMATI	01/31/2014
ZOLTAN F. BIACS	01/29/2014
DOUGLAS N. ROWITCH	02/05/2013
DOMINIC FARMER	01/28/2014
SRIGOURI KAMARSU	02/06/2014
JIE WU	02/13/2013

RECEIVING PARTY DATA

Name:	QUALCOMM Incorporated		
Street Address:	5775 Morehouse Drive		
City:	San Diego		
State/Country:	CALIFORNIA		
Postal Code:	92121		

PROPERTY NUMBERS Total: 1

Property Type	Number		
Application Number:	16191271		

CORRESPONDENCE DATA

Fax Number: (858)658-2502

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: us-docketing@qualcomm.com

Correspondent Name: QUALCOMM INCORPORATED

Correspondent Name: QUALCOMM INCORPORATE Address Line 1: 5775 MOREHOUSE DRIVE

Address Line 4: SAN DIEGO, CALIFORNIA 92121

ATTORNEY DOCKET NUMBER:	081454D1C1C1C1
NAME OF SUBMITTER:	DULCIE FONTT
SIGNATURE:	/Dulcie Fontt/
DATE SIGNED:	03/01/2019

PATENT REEL: 048976 FRAME: 0335

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Total Attachments: 28 source=081454D1C1C1C1_ASG_20190301_Signed#page1.tif source=081454D1C1C1C1 ASG 20190301 Signed#page2.tif source=081454D1C1C1C1 ASG 20190301 Signed#page3.tif source=081454D1C1C1C1_ASG_20190301_Signed#page4.tif source=081454D1C1C1C1 ASG 20190301 Signed#page5.tif source=081454D1C1C1C1 ASG 20190301 Signed#page6.tif source=081454D1C1C1C1 ASG 20190301 Signed#page7.tif source=081454D1C1C1C1_ASG_20190301_Signed#page8.tif source=081454D1C1C1C1 ASG 20190301 Signed#page9.tif source=081454D1C1C1C1 ASG 20190301 Signed#page10.tif source=081454D1C1C1C1_ASG_20190301_Signed#page11.tif source=081454D1C1C1C1_ASG_20190301_Signed#page12.tif source=081454D1C1C1C1 ASG 20190301 Signed#page13.tif source=081454D1C1C1C1 ASG 20190301 Signed#page14.tif source=081454D1C1C1C1_ASG_20190301_Signed#page15.tif source=081454D1C1C1C1_ASG_20190301_Signed#page16.tif source=081454D1C1C1C1 ASG 20190301 Signed#page17.tif source=081454D1C1C1C1 ASG 20190301 Signed#page18.tif source=081454D1C1C1C1 ASG 20190301 Signed#page19.tif source=081454D1C1C1C1 ASG 20190301 Signed#page20.tif source=081454D1C1C1C1 ASG 20190301 Signed#page21.tif source=081454D1C1C1C1 ASG 20190301 Signed#page22.tif source=081454D1C1C1C1 ASG 20190301 Signed#page23.tif source=081454D1C1C1C1 ASG 20190301 Signed#page24.tif source=081454D1C1C1C1 ASG 20190301 Signed#page25.tif source=081454D1C1C1C1 ASG 20190301 Signed#page26.tif source=081454D1C1C1C1_ASG_20190301_Signed#page27.tif source=081454D1C1C1C1_ASG_20190301_Signed#page28.tif

PATENT REEL: 048976 FRAME: 0336

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2720882

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MARC ANTHONY ISCHE	02/07/2014
AHMAD HATAMI	02/06/2014
ARDALAN HESHMATI	01/31/2014
ZOLTAN F. BIACS	01/29/2014
DOUGLAS N. ROWITCH	02/05/2013
DOMINIC FARMER	01/28/2014
SRIGOURI KAMARSU	02/06/2014
JIE WU	02/13/2013

RECEIVING PARTY DATA

Name:	QUALCOMM Incorporated		
Street Address:	5775 Morehouse Drive		
Internal Address:	Patent Department/Central Administration		
City:	San Diego		
State/Country:	CALIFORNIA		
Postal Code:	92121		

PROPERTY NUMBERS Total: 3

Property Type	Number
Application Number:	13750851
Application Number:	12792678
Application Number:	61184410

CORRESPONDENCE DATA

Fax Number: (858)658-2502 Phone: 858-845-4265

Email: us-docketing@qualcomm.com

Correspondence will be sent via US Mail when the email attempt is unsuccessful.

PATENT

REEL: 032186 FRAME: 0647 PATENT

REEL: 048976 FRAME: 0337

502674275

Correspondent Name: QUALCOMM INCORPORATED Address Line 1: 5775 MOREHOUSE DR. Address Line 4: SAN DIEGO, CALIFORNIA 92121		
ATTORNEY DOCKET NUMBER:	081454D1	
NAME OF SUBMITTER:	JOSEPH SALAZAR	
Signature:	/JOSEPH SALAZAR/	
Date:	02/10/2014	
Total Attachments: 24 source=081454D1_2014_02_07_Assignme	nt#page2.tif nt#page3.tif nt#page5.tif nt#page5.tif nt#page6.tif nt#page7.tif nt#page8.tif nt#page8.tif nt#page9.tif nt#page10.tif nt#page11.tif nt#page12.tif nt#page13.tif nt#page15.tif nt#page15.tif nt#page15.tif nt#page16.tif nt#page16.tif nt#page17.tif nt#page18.tif nt#page20.tif nt#page20.tif nt#page20.tif nt#page21.tif nt#page21.tif	

PATENT REEL: 032186 FRAME: 0648 PATENT

REEL: 048976 FRAME: 0338

WHEREAS, WE,

- 1. Marc Anthony ISCHE, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of San Diego, CA,
- 2. Ahmad HATAMI, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of Pleasanton, CA,
- Ardalan HESHMATI, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of Saratoga, CA,
- 4. Zoltan F. BIACS, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of San Mateo, CA,
- Douglas N. ROWITCH, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of Honolulu, Hawaii,
- 6. **Dominic FARMER**, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of Los Gatos, CA,
- 7. Srigouri KAMARSU, a citizen of Canada, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of Cupertino, CA,
- 8. Jie WU, a citizen of China, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of San Diego, CA,

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to ON DEMAND POSITIONING (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, QUALCOMM Incorporated (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s), 13/750,851 filed January 25, 2013, Qualcomm Reference No. 081454D1, and all provisional applications relating thereto, together with U.S. Application No(s). 12/792,678, filed February 10, 2013, Qualcomm Reference No. 081454, together with U.S. Provisional Application No(s). 61/184,410, filed June 5, 2009, Qualcomm Reference No. 081454P1, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States:

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Dona et	S. D	SAME I	2/7/iu	
LAURE AL	San Diego LOCATION	OII	DATE	Mare Anthony ISCHE
Done at _		, on	DATE	
	LOCATION		DATE	Ahmad HATAMI
Done at _		, on	DATE	<u> </u>
	LOCATION		DATE	Ardalan HESHMATI
Done at _		, on	DATE	
	LOCATION		DATE	Zoltan F. BIACS
Done at _	LOCATION	, on		
	LOCATION		DATE	Douglas N. ROWITCH
Done at _		, on	DATE	
	LOCATION		DATE	Dominic FARMER
Done at _		, on	ge eksterhilagiskussikhilasis (p. 1. e. lajapo), es gestenhilasis en nyapunna	Srigouri KAMARSU
	LOCATION		DATE	Srigouri KAMARSU
Done at _		_, on	DATE	
	LOCATION		DATE	Jie WU

WHEREAS, WE,

- 1. Marc Anthony ISCHE, a citizen of the United States of America, having a mailing address located at 5775 Morchouse Drive, San Diego, CA, 92121, and a resident of San Diego, CA,
- 2. Ahmad HATAMI, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of Pleasanton, CA,
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- 8. **Jie WU**, a citizen of China, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of San Diego, CA,

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to **ON DEMAND POSITIONING** (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, QUALCOMM Incorporated (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s), 13/750,851 filed January 25, 2013, Qualcomm Reference No. 081454D1, and all provisional applications relating thereto, together with U.S. Application No(s). 12/792,678, filed February 10, 2013, Qualcomm Reference No. 081454, together with U.S. Provisional Application No(s). 61/184,410, filed June 5, 2009, Qualcomm Reference No. 081454P1, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

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AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at		, on		
•	LOCATION		DATE	Marc Anthony ISCHE
Done at	Santa Clare	, on _	2/6/2014	A.HATAHIZ AS
	LOCATION		DATE	Ahmad HATAMI
Done at	LOCATION	, on _		
	LOCATION		DATE	Ardalan HESHMATI
Done at		, on	DATE	
	LOCATION		DATE	Zoltan F. BIACS
·				
Done at	LOCATION	on_	DATE	Douglas N. ROWITCH
Done at		, on	DATE	
	LOCATION		DATE	Dominic FARMER
Done at		. on		
	LOCATION	<i>.</i> ,	DATE	Srigouri KAMARSU
Done at	LOCATION	, on		
	LOCATION		DATE	Jie WU

WHEREAS, WE,

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WHEREAS, QUALCOMM Incorporated (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s), 13/750,851 filed January 25, 2013, Qualcomm Reference No. 081454D1, and all provisional applications relating thereto, together with U.S. Application No(s), 12/792,678, filed February 10, 2013, Qualcomm Reference No. 081454, together with U.S. Provisional Application No(s). 61/184,410, filed June 5, 2009, Qualcomm Reference No. 081454P1, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States:

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at	•	on	
acconduction planes in	LOCATION	on	Marc Anthony ISCHE
Done at	LOCATION ,	on	Ahmad HATAMI
Done at <u>Sa</u>	RATOGA CA, LOCATION	on <u>/-3j-/4</u> DATE	ALL HOLE Ardalan HESHMATI
Done at	LOCATION ,	on	Zoltan F. BIACS
Done at	LOCATION ,	on	Douglas N. ROWITCH
		on	-
Done at	,	on	Srigouri KAMARSU
		on	
	~~~	APP X C X.	SHIP ALE

# WHEREAS, WE,

- 1. Marc Anthony ISCHE, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of San Diego, CA,
- 2. Ahmad HATAMI, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of Pleasanton, CA,
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AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at	, on		
Done atLOCAT	TION	DATE	Marc Anthony ISCHE
Done at	, on	······································	
LOCAT	rion	DATE	Ahmad HATAMI
Done at	, on	·····	
LOCAT	LION	DATE	Ardalan HESHMATI
Done at Such	Clara A, on 1	1/29/2014	s ZUF Z
LOCAT	rion (	'bate	Zoltan F. BIACS
Done at	, on		
Done atLOCA	non	DATE	Douglas N. ROWITCH
Done at	, on		
LOCA	LION	DATE	Dominic FARMER
Done at	, on		Srigouri KAMARSU
LOCA	LION	DATE	Srigouri KAMARSU
Done at	, on		
LOCA	TION	DATE	Jie WU

# WHEREAS, WE,

- 1. Marc Anthony ISCHE, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of San Diego, CA,
- 2. Ahmad HATAMI, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of Pleasanton, CA,
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- 8. **Jie WU**, a citizen of China, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121, and a resident of San Diego, CA,

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to **ON DEMAND POSITIONING** (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, QUALCOMM Incorporated (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States. including but not limited to U.S. Application No(s). 13/750,851 filed January 25, 2013, Qualcomm Reference No. 081454D1, and all provisional applications relating thereto, together with U.S. Application No(s). 12/792,678, filed February 10, 2013, Qualcomm Reference No. 081454, together with U.S. Provisional Application No(s). 61/184,410, filed June 5, 2009, Qualcomm Reference No. 081454P1, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States:

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Done at		, on		
	LOCATION	DA	TE	Marc Anthony ISCHE
Done at	LOCATION	, on		
	LOCATION	DA	TE	Ahmad HATAMI
Done at		, on		
	LOCATION	DA	TE	Ardalan HESHMATI
Done at _	LOCATION	, on		
	LOCATION	DA	ATE	Zoltan F. BIACS
Done at 1	Honoluly, HI	on 2/5	/13	
	LOCATION	DA	ATE	Douglas N. ROWITCH
Done at	LOCATION	, on		
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Done at _	LOCATION			
	LOCATION	DA	ATE	Srigouri KAMARSU
Done at _	LOCATION	, on		
	LOCATION	DA	<b>NTE</b>	Jie WU

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Done at	, on	
LOCATION	DATE	Marc Anthony ISCHE
Done atLOCATION	, on	
LOCATION	DATE	Ahmad HATAMI
Done atLOCATION	, on	
LOCATION	DATE	Ardalan HESHMATI
Done atLOCATION	, on	
LOCATION	DATE	Zoltan F. BIACS
Done at	on	
Done atLOCATION	DATE	Douglas N. ROWITCH
Done at Suff Clun	on 1/28/14	Milles
LOCATION	DATE	Dominie FARMER
Done at	on	
LOCATION	DATE	Srigouri KAMARSU
Done at	. On	
LOCATION	DATE	Jie WU

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Done at	, on	
LOCATION	DATE	Marc Anthony ISCHE
Done atLOCATION	, on	
LOCATION	DATE	Ahmad HATAMI
Done at	. On	
Done atLOCATION	DATE	Ardalan HESHMATI
Dono at	0.7	
Done atLOCATION	DATE	Zoltan F. BIACS
Done atLOCATION	, on	
LOCATION	DATE	Douglas N. ROWITCH
Done atLOCATION	_, on	
LOCATION	DATE	Dominic FARMER
Done at Santa Clava	on 2/6/14	K-Li Gour
LOCATION	DATE	Srigouri KAMARSU
Done at	, on	
Done atLOCATION	DATE	Jie WU

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Page 3 of 3

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at		, on	
	LOCATION	on	Marc Anthony ISCHE
Done at _		, on	
	LOCATION	DATE	Ahmad HATAMI
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Done at _	<del></del>	, on	
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Done at _		, on	
	LOCATION	DATE	Zoltan F. BIACS
Done at _		, on	Douglas N. ROWITCH
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	LOCATION	onDATE	Srigouri KAMARSU
Done at\$	an Diego, CA	, on 2/13/13	Jie Uu Jie WU
	LOCATION	DATE	Jie WÜ

PATENT REEL: 0**3**2986 FRAME: 0882

RECORDED: 02/00/2018