506280726 09/30/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6327473

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LOUIS D. FIELDER	02/17/2015
ZHIWEI SHUANG	03/12/2015
GRANT A. DAVIDSON	02/24/2015
XIGUANG ZHENG	02/25/2015
MARK S. VINTON	02/24/2015

RECEIVING PARTY DATA

Name:	DOLBY LABORATORIES LICENSING CORPORATION
Street Address:	1275 MARKET STREET
City:	SAN FRANCISCO
State/Country:	CALIFORNIA
Postal Code:	94103-1410

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16986308

CORRESPONDENCE DATA

Fax Number: (415)645-4000

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: (415)558-0200
Email: patents@dolby.com

Correspondent Name: DOLBY LABORATORIES, INC.

Address Line 1: 1275 MARKET STREET

Address Line 4: SAN FRANCISCO, CALIFORNIA 94103-1410

ATTORNEY DOCKET NUMBER:	D14148US04
NAME OF SUBMITTER:	BIANCA MIYAKAWA
SIGNATURE:	/Bianca Miyakawa/
DATE SIGNED:	09/30/2020

Total Attachments: 10

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PATENT REEL: 053932 FRAME: 0324

506280726



PATENT REEL: 053932 FRAME: 0325

	ED DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN JICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE
Title of Invention	Reverberation Generation for Headphone Virtualization
As the belov	v named inventor, I hereby declare that:
This declara	tion is directed to:
☐ Th	e attached application, or
	inese Patent Application Number 201510077020.3 filed on February 12,2015 and United tes Patent Application number: 62/117,206 filed on February 17, 2015.
The above-id	entified application was made or authorized to be made by me.
I believe that	I am the original inventor or an original joint inventor of a claimed invention in the application.
	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 prisonment of not more than (5) years, or both.
corporation, hereinafter re said applicat improvemen States and al NOV ASSIGNOR ASSIGNOR 1. A extent ASSIG	SSIGNOR hereby grants, sells, assigns, transfers and conveys unto ASSIGNEE, or to the GNOR has already done so, ASSIGNOR hereby confirms the grant, sale, assignment, transfernce unto ASSIGNEE of the entire right, title and interest:
filing is a me Convention), in-part of, or application, i each country	 (a) in and to said application, invention, and improvements thereto, and each and every plication filed anywhere in the world, whether or not the country, jurisdiction, or authority of imber of the International Union for the Protection of Industrial Property (The Paris which additional application is a division of, substitution of, continuation of, continuation is a counterpart of, or is in any way based on, claims priority from, or relates to, said nivention or improvements thereto; (b) all priority rights associated with the filing of each and every such application, for of The Paris Convention, for the Patent Cooperation Treaty, for the European Patent for all other treaties of like purposes, and for Taiwan; and
be granted by on any of the reexaminatio 2. A to anyone oth or said inven previous assi	(c) in and to each and every patent on said invention or improvements thereto that may any country, jurisdiction or authority, including each and every patent that may be granted applications referred to in sub-section (a), and in and to each and every reissue, n certificate, or extension of each and every such patent. SSIGNOR hereby warrants, covenants and represents that he/she has not heretofore granted for than ASSIGNEE any license, right or privilege in respect to the said applications, patents, tion, nor in any other way encumbered the same, and that he/she has, or in the case of a grament to ASSIGNEE, ASSIGNOR had the full right to convey, free of all licenses and s, the entire right, title and interest hereby assigned.

- 3. ASSIGNOR covenants and agrees that at the request and expense of ASSIGNEE he/she will promptly execute all papers deemed necessary or desirable by ASSIGNEE to perfect ownership of said invention, applications, and patents to ASSIGNEE, and execute all oaths, declarations and other papers deemed necessary or desirable by ASSIGNEE for prosecuting said applications and patents, for use in interference proceedings involving said invention, applications and patents, for use in opposition proceedings involving said invention, applications and patents, for refiling said applications, for filing of divisional, substitution, continuation or continuation-in-part applications deemed necessary or desirable by ASSIGNEE, for reissuance or reexamination of said patents, or for the filing in foreign countries of applications for patents counterpart to or in any way based on or relates to said application or to an application which is a division of, substitution of, continuation of, continuation-in-part of, said application or which application claims priority from or relates to said invention or improvements thereto. ASSIGNOR further covenants and agrees that at the expense and request of ASSIGNEE, he/she will promptly assist ASSIGNEE in interference, opposition and reexamination proceedings involving said invention, applications and patents, and in litigation involving said invention, applications and patents, and will assist in the ascertainment of facts and the production of evidence relating to said invention. applications and patents.
- 4. The terms, covenants and provisions of this ASSIGNMENT shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, his/her heirs, legal representatives and assigns.

IN TESTIMONY WHEREOF, I have executed this instrument.

LEGAL NAME OF INVENTOR

Inventor	V covid Th Windiday	Data	ì
mvemor.	Louis D. Fielder	Date:	Ł

Signature: Louis D. Frankle

Notarial Acknowledgement

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF SAN FRANCISCO SS.

On Following the personally appeared Louis D. Fielder, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

CAMI BRUNJES
COMM. # 2058819
NOTARY PUBLIC-CALIFORNIA
SAN FRANCISCO COUNTY
My Comm. Exp. March 13, 2018
[Seal]

Signature of Notary Public

My Commission Expires: MAYZれても、2018

Docket: <u>D14148CN01-USP1</u>

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE
Title of Invention Reverberation Generation for Headphone Virtualization
As the below named inventor, I hereby declare that:
This declaration is directed to:
☐ The attached application, or
Chinese Patent Application Number 201510077020.3 filed on February 12, 2015 and United States patent application number: 62/117,296 filed on February 17, 2015.
The above-identified application was made or authorized to be made by me.
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
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 (5) years, or both.
WHEREAS, DOLBY LABORATORIES LICENSING CORPORATION, a New York corporation, having a place of business at 100 Potrero Avenue, San Francisco, California, 94103, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said application and the invention to which said application is directed, in and to any and all improvements relating to said invention, and in and to all patents thereon, when granted in the United States and all foreign countries; NOW, THEREFORE, in consideration of good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt and sufficiency of which is hereby acknowledged by ASSIGNOR: 1. ASSIGNOR hereby grants, sells, assigns, transfers and conveys unto ASSIGNEE, or to the extent ASSIGNOR has already done so, ASSIGNOR hereby confirms the grant, sale, assignment, transfer and conveyance unto ASSIGNEE of the entire right, title and interest: (a) in and to said application, invention, and improvements thereto, and each and every additional application filed anywhere in the world, whether or not the country, jurisdiction, or authority of filing is a member of the International Union for the Protection of Industrial Property (The Paris Convention), which additional application is a division of, substitution of, continuation of, continuation-in-part of, or is a counterpart of, or is in any way based on, claims priority from, or relates to, said application, invention or improvements thereto;
(b) all priority rights associated with the filing of each and every such application, for each country of The Paris Convention, for the Patent Cooperation Treaty, for the European Patent Convention, for all other treaties of like purposes, and for Taiwan; and (c) in and to each and every patent on said invention or improvements thereto that may be granted by any country, jurisdiction or authority, including each and every patent that may be granted on any of the applications referred to in sub-section (a), and in and to each and every reissue, reexamination certificate, or extension of each and every such patent. 2. ASSIGNOR hereby warrants, covenants and represents that he/she has not heretofore granted to anyone other than ASSIGNEE any license, right or privilege in respect to the said applications, patents, or said invention, nor in any other way encumbered the same, and that he/she has, or in the case of a previous assignment to ASSIGNEE, ASSIGNOR had the full right to convey, free of all licenses and encumbrances, the entire right, title and interest hereby assigned.

- 3. ASSIGNOR covenants and agrees that at the request and expense of ASSIGNEE he/she will promptly execute all papers deemed necessary or desirable by ASSIGNEE to perfect ownership of said invention, applications, and patents to ASSIGNEE, and execute all oaths, declarations and other papers deemed necessary or desirable by ASSIGNEE for prosecuting said applications and patents, for use in interference proceedings involving said invention, applications and patents, for use in opposition proceedings involving said invention, applications and patents, for refiling said applications, for filing of divisional, substitution, continuation or continuation-in-part applications deemed necessary or desirable by ASSIGNEE, for reissuance or reexamination of said patents, or for the filing in foreign countries of applications for patents counterpart to or in any way based on or relates to said application or to an application which is a division of, substitution of, continuation of, continuation-in-part of, said application or which application claims priority from or relates to said invention or improvements thereto. ASSIGNOR further covenants and agrees that at the expense and request of ASSIGNEE, he/she will promptly assist ASSIGNEE in interference, opposition and reexamination proceedings involving said invention, applications and patents, and in litigation involving said invention, applications and patents, and will assist in the ascertainment of facts and the production of evidence relating to said invention, applications and patents.
- 4. The terms, covenants and provisions of this ASSIGNMENT shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, his/her heirs, legal representatives and assigns.

IN TESTIMONY WHEREO	F, I have executed this	instrument.		
LEGAL NAME OF INVENT	TOR			فيمنى
gi iliali a aliial		-7011	(2,12)	T.
Inventor: Zhiwei Shuang		Date:		
	1 s			v.
	12			
Signature:			*******	

In the presence of:	In the presence of:
<u> </u>	Chan Zhay, 0
Signature of Witness	Signature of Witness
Xiquang ZHENG	Chen Zhang
Print Witness's Name	Print Witness's Name
77	

Print Witness's Address

Docket: D14148CN01-USP1

Print Witness's Address

COMBINED DECLARATION (37 CFR L63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR L76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Arri	MAHMA BATA	7 200 E 1 (3) (.rn 1./0)/8(9)	i assini	NEED NEED WA
Title of	Reverberatio	on Generation	ı for Headpb	one Virtu	alization
Invention					
As the below	v named invento	r, I hereby dec	lare that:		

This declaration is directed to:

The attached application, or

Chinese Patent Application Number <u>201510077020.3</u> filed on <u>February 12,2015</u> and United States Patent Application number: <u>62/117,206</u> filed on <u>February 17, 2015</u>

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

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 (5) years, or both.

WHEREAS, DOLBY LABORATORIES LICENSING CORPORATION, a New York corporation, having a place of business at 100 Potrero Avenue, San Francisco, California, 94103, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said application and the invention to which said application is directed, in and to any and all improvements relating to said invention, and in and to all patents thereon, when granted in the United States and all foreign countries;

NOW, THEREFORE, in consideration of good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt and sufficiency of which is hereby acknowledged by ASSIGNOR.

- 1. ASSIGNOR hereby grants, sells, assigns, transfers and conveys unto ASSIGNEE, or to the extent ASSIGNOR has already done so, ASSIGNOR hereby confirms the grant, sale, assignment, transfer and conveyance unto ASSIGNEE of the entire right, title and interest:
- (a) in and to said application, invention, and improvements thereto, and each and every additional application filed anywhere in the world, whether or not the country, jurisdiction, or authority of filing is a member of the International Union for the Protection of Industrial Property (The Paris Convention), which additional application is a division of, substitution of, continuation of, continuationin-part of, or is a counterpart of, or is in any way based on, claims priority from, or relates to, said application, invention or improvements thereto;
- (b) all priority rights associated with the filing of each and every such application, for each country of The Paris Convention, for the Patent Cooperation Treaty, for the European Patent Convention, for all other treaties of like purposes, and for Taiwan; and
- (c) in and to each and every patent on said invention or improvements thereto that may be granted by any country, jurisdiction or authority, including each and every patent that may be granted on any of the applications referred to in sub-section (a), and in and to each and every reissue, reexamination certificate, or extension of each and every such patent.
- 2. ASSIGNOR hereby warrants, covenants and represents that he/she has not heretofore granted to anyone other than ASSIGNEE any license, right or privilege in respect to the said applications, patents, or said invention, nor in any other way encumbered the same, and that he/she has, or in the case of a previous assignment to ASSIGNEE, ASSIGNOR had the full right to convey, free of all licenses and encumbrances, the entire right, title and interest hereby assigned.

Docket: D14148CN01-USP1

PATENT REEL: 053932 FRAME: 0330

- ASSIGNOR covenants and agrees that at the request and expense of ASSIGNEE he/she will promptly execute all papers deemed necessary or desirable by ASSIGNEE to perfect ownership of said invention, applications, and patents to ASSIGNEE, and execute all oaths, declarations and other papers deemed necessary or desirable by ASSIGNEE for prosecuting said applications and patents, for use in interference proceedings involving said invention, applications and patents, for use in opposition proceedings involving said invention, applications and patents, for refiling said applications, for filing of divisional, substitution, continuation or continuation-in-part applications deemed necessary or desirable by ASSIGNEE, for reissuance or reexamination of said patents, or for the filing in foreign countries of applications for patents counterpart to or in any way based on or relates to said application or to an application which is a division of, substitution of, continuation of, continuation-in-part of, said application or which application claims priority from or relates to said invention or improvements thereto. ASSIGNOR further covenants and agrees that at the expense and request of ASSIGNEE, he/she will promptly assist ASSIGNEE in interference, opposition and reexamination proceedings involving said invention, applications and patents, and in litigation involving said invention, applications and patents, and will assist in the ascertainment of facts and the production of evidence relating to said invention, applications and patents.
- 4. The terms, covenants and provisions of this ASSIGNMENT shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, his/her heirs, legal representatives and assigns.

IN TESTIMONY WHEREOF, I have executed this instrument.

LEGAL NAME OF INVENTOR

Inventor: Grant A. Davidson

Date: 2/24/15

Signature

Notarial Acknowledgement

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE of CALIFORNIA

COUNTY OF Los Angoles

On Falmon 24,2015, before me. Originally appeared Grant A. Davidson, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

Legrify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official scal.

OCTAVIO GALLARDO
Commission # 2053065
Notally Public - California
Los Angeles Cquiny
My Comm Exoles My 17, 2018

Signature of Notary Public

My Commission Expires: 19/16

17, 2018

Docket: D14148CN01-USP1

PATENT REEL: 053932 FRAME: 0331

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE Title of Reverberation Generation for Headphone Virtualization Invention As the below named inventor, I hereby declare that: This declaration is directed to: The attached application, or Chinese Patent Application Number 201510077020.3 filed on February 12, 2015 and United States patent application number: 62/117,206 filed on February 17, 2015. The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. 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 (5) years, or both. WHEREAS, DOLBY LABORATORIES LICENSING CORPORATION, a New York corporation, having a place of business at 100 Potrero Avenue, San Francisco, California, 94103, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said application and the invention to which said application is directed, in and to any and all improvements relating to said invention, and in and to all patents thereon, when granted in the United States and all foreign countries; NOW, THEREFORE, in consideration of good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt and sufficiency of which is hereby acknowledged by 1. ASSIGNOR hereby grants, sells, assigns, transfers and conveys unto ASSIGNEE, or to the extent ASSIGNOR has already done so, ASSIGNOR hereby confirms the grant, sale, assignment, transfer and conveyance unto ASSIGNEE of the entire right, title and interest: (a) in and to said application, invention, and improvements thereto, and each and every additional application filed anywhere in the world, whether or not the country, jurisdiction, or authority of filing is a member of the International Union for the Protection of Industrial Property (The Paris Convention), which additional application is a division of, substitution of, continuation of, continuationin-part of, or is a counterpart of, or is in any way based on, claims priority from, or relates to, said application, invention or improvements thereto; (b) all priority rights associated with the filing of each and every such application, for each country of The Paris Convention, for the Patent Cooperation Treaty, for the European Patent Convention, for all other treaties of like purposes, and for Taiwan; and (c) in and to each and every patent on said invention or improvements thereto that may be granted by any country, jurisdiction or authority, including each and every patent that may be granted on any of the applications referred to in sub-section (a), and in and to each and every reissue, reexamination certificate, or extension of each and every such patent. 2. ASSIGNOR hereby warrants, covenants and represents that he/she has not heretofore granted

to anyone other than ASSIGNEE any license, right or privilege in respect to the said applications, patents, or said invention, nor in any other way encumbered the same, and that he/she has, or in the case of a previous assignment to ASSIGNEE, ASSIGNOR had the full right to convey, free of all licenses and

Docket: D14148CN01-USP1

encumbrances, the entire right, title and interest hereby assigned.

- 3. ASSIGNOR covenants and agrees that at the request and expense of ASSIGNEE he/she will promptly execute all papers deemed necessary or desirable by ASSIGNEE to perfect ownership of said invention, applications, and patents to ASSIGNEE, and execute all oaths, declarations and other papers deemed necessary or desirable by ASSIGNEE for prosecuting said applications and patents, for use in interference proceedings involving said invention, applications and patents, for use in opposition proceedings involving said invention, applications and patents, for refiling said applications, for filing of divisional, substitution, continuation or continuation-in-part applications deemed necessary or desirable by ASSIGNEE, for reissuance or reexamination of said patents, or for the filing in foreign countries of applications for patents counterpart to or in any way based on or relates to said application or to an application which is a division of, substitution of, continuation of, continuation-in-part of, said application or which application claims priority from or relates to said invention or improvements thereto. ASSIGNOR further covenants and agrees that at the expense and request of ASSIGNEE, he/she will promptly assist ASSIGNEE in interference, opposition and reexamination proceedings involving said invention, applications and patents, and in litigation involving said invention, applications and patents, and will assist in the ascertainment of facts and the production of evidence relating to said invention, applications and patents.
- 4. The terms, covenants and provisions of this ASSIGNMENT shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, his/her heirs, legal representatives and assigns.

Date: Feb. 25, 2015

IN TESTIMONY WHEREOF, I have executed this instrument.

LEGAL NAME OF INVENTOR

Inventor: Xiguang Zheng

Signature: \(\sqrt{1}\sqrt{2}\sqrt{3}\)		
In the presence of:	In the presence of:	~
Kaz Z/ (1) Signature of Witness	Chen Zhand (2) Signature of Witness	
Kar Le	Chen Zhang	
Print Witness's Name	Print Witness's Name	
WFC, Beijng, China	WFC. Beijug Chin	į,
Print Witness's Address	Print Witness's Address	

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE Title of Reverberation Generation for Headphone Virtualization Invention As the below named inventor, I hereby declare that: This declaration is directed to: The attached application, or Chinese Patent Application Number 201510077020.3 filed on February 12,2015 and United States Patent Application number: 62/117,206 filed on February 17, 2015. The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. 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 (5) years, or both. WHEREAS, DOLBY LABORATORIES LICENSING CORPORATION, a New York corporation, having a place of business at 100 Potrero Avenue, San Francisco, California, 94103, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said application and the invention to which said application is directed, in and to any and all improvements relating to said invention, and in and to all patents thereon, when granted in the United States and all foreign countries;

NOW, THEREFORE, in consideration of good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt and sufficiency of which is hereby acknowledged by ASSIGNOR:

- 1. ASSIGNOR hereby grants, sells, assigns, transfers and conveys unto ASSIGNEE, or to the extent ASSIGNOR has already done so, ASSIGNOR hereby confirms the grant, sale, assignment, transfer and conveyance unto ASSIGNEE of the entire right, title and interest:
- (a) in and to said application, invention, and improvements thereto, and each and every additional application filed anywhere in the world, whether or not the country, jurisdiction, or authority of filing is a member of the International Union for the Protection of Industrial Property (The Paris Convention), which additional application is a division of, substitution of, continuation of, or is a counterpart of, or is in any way based on, claims priority from, or relates to, said application, invention or improvements thereto;
- (b) all priority rights associated with the filing of each and every such application, for each country of The Paris Convention, for the Patent Cooperation Treaty, for the European Patent Convention, for all other treaties of like purposes, and for Taiwan; and
- (c) in and to each and every patent on said invention or improvements thereto that may be granted by any country, jurisdiction or authority, including each and every patent that may be granted on any of the applications referred to in sub-section (a), and in and to each and every reissue, reexamination certificate, or extension of each and every such patent.
- 2. ASSIGNOR hereby warrants, covenants and represents that he/she has not heretofore granted to anyone other than ASSIGNEE any license, right or privilege in respect to the said applications, patents, or said invention, nor in any other way encumbered the same, and that he/she has, or in the case of a previous assignment to ASSIGNEE, ASSIGNOR had the full right to convey, free of all licenses and encumbrances, the entire right, title and interest hereby assigned.

- 3. ASSIGNOR covenants and agrees that at the request and expense of ASSIGNEE he/she will promptly execute all papers deemed necessary or desirable by ASSIGNEE to perfect ownership of said invention, applications, and patents to ASSIGNEE, and execute all oaths, declarations and other papers deemed necessary or desirable by ASSIGNEE for prosecuting said applications and patents, for use in interference proceedings involving said invention, applications and patents, for use in opposition proceedings involving said invention, applications and patents, for refiling said applications, for filing of divisional, substitution, continuation or continuation-in-part applications deemed necessary or desirable by ASSIGNEE, for reissuance or reexamination of said patents, or for the filing in foreign countries of applications for patents counterpart to or in any way based on or relates to said application or to an application which is a division of, substitution of, continuation of, continuation-in-part of, said application or which application claims priority from or relates to said invention or improvements thereto. ASSIGNOR further covenants and agrees that at the expense and request of ASSIGNEE, he/she will promptly assist ASSIGNEE in interference, opposition and reexamination proceedings involving said invention, applications and patents, and in litigation involving said invention, applications and patents, and will assist in the ascertainment of facts and the production of evidence relating to said invention, applications and patents.
- 4. The terms, covenants and provisions of this ASSIGNMENT shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, his/her heirs, legal representatives and assigns.

IN TESTIMONY WHEREOF, I have executed this instrument.

LEGAL NAME OF INVENTOR

Inventor: Mark S. Vinton

Date: Formary 24

Notarial Acknowledgement

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the STATE of CALIFORNIA truthfulness, accuracy, or validity of that document. COUNTY OF SAN FRANCISCO

Cami Bruije & Notary Public, , before me, personally appeared Mark S. Vinton, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct,

WITNESS my hand and official seal.

CAMI BRUNJES COMM. # 2058819 NOTARY PUBLIC - CALIFORNIA SAN FRANCISCO COUNTY My Comm. Exp. March 13, 2018 Seall

Signature of Notary Public

My Commission Expires: March 13 2018

Docket: D14148CN01-USP1

PATENT

REEL: 053932 FRAME: 0335