505336887 02/20/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5383668

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LIGHTHOUSE AI, INC.	12/14/2018

RECEIVING PARTY DATA

Name:	APPLE INC.
Street Address:	ONE APPLE PARK WAY
City:	CUPERTINO
State/Country:	CALIFORNIA
Postal Code:	95014

PROPERTY NUMBERS Total: 9

Property Type	Number
Application Number:	14813907
Application Number:	15069822
Application Number:	15297644
Application Number:	15132513
Application Number:	15442290
Application Number:	15445501
Application Number:	15629385
Application Number:	15628236
PCT Number:	US2016044456

CORRESPONDENCE DATA

Fax Number: (415)576-0300

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: 415-576-0200

Email: pcaldwell@kilpatricktownsend.com

Correspondent Name: KILPATRICK TOWNSEND & STOCKTON LLP/APPLE

Address Line 1: 1100 PEACHTREE STREET
Address Line 2: MAILSTOP: IP DOCKETING 22
Address Line 4: ATLANTA, GEORGIA 30309

ATTORNEY DOCKET NUMBER: 090911-1127142

NAME OF SUBMITTER: PATRICIA CALDWELL

PAIENI

505336887 REEL: 048383 FRAME: 0501

SIGNATURE:	/Patricia Caldwell/
DATE SIGNED:	02/20/2019
Total Attachments: 10	
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ASSIGNMENT

This Assignment (hereinafter this "Assignment") is made with effect as of December 14, 2018, by Lighthouse AI, Inc., a corporation duly organized under the laws of Delaware and having an address at 380 Portage Avenue, Palo Alto, California 94306 (hereinafter the "Assignor"):

WHEREAS, in this Assignment "Patents" means any domestic or foreign patents, utility models, and applications, disclosures and drafts relating thereto (and any patents or utility models that issue as a result of those applications and disclosures), and any reissues, divisions, divisionals, continuations, continuation-in-parts, provisionals, renewals, extensions, substitutions, re-examinations, or invention registrations related to such patents, utility models and applications;

WHEREAS, the Assignor is the owner of all of the worldwide rights, title and interest in and to the patents and patent applications set forth on <u>Schedule A</u> hereto (hereinafter the "<u>Listed Patents and Applications</u>"); and

WHEREAS, Apple Inc., a corporation duly organized under and pursuant to the laws of the State of California, and having a principal place of business at One Apple Park Way, Cupertino, California 95014 (hereinafter the "Assignee"), is desirous of acquiring the entire worldwide right, title and interest in and to said Listed Patents and Applications and the Assigned Patents and Applications (as defined below).

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged:

1. The Assignor has sold, assigned, transferred and conveyed, and by this Assignment does hereby sell, assign, transfer and convey, unto said Assignee, its successors, legal representatives and assigns, the Assignor's entire worldwide right, title and interest in and to all of the following (to have and hold forever, free and clear of all liens, restrictions or encumbrances): (a) the above-mentioned Listed Patents and Applications; (b) Patents filed from, or claiming priority from or common priority with, the Listed Patents and Applications, including, but not limited to, reissues, divisions, divisionals, continuations, continuation-in-parts, provisionals, renewals, extensions, substitutions, re-examinations, or invention registrations; (c) Patents which issue from the Patents specified in any of (a) to (b); and (d) renewals, revalidations, reissuances, re-examinations, substitutions, revisions, confirmations, additions and extensions of any of the Patents specified in any of (a) to (c), along with all rights to sue (and to recover and retain damages and other remedies) in respect of any past (including, but not limited to, prior to the date hereof), present and future infringement, violation, misappropriation, misuse or unauthorised use of any of the foregoing (a) to (d) (collectively, the "Assigned Patents and Applications"); together with all rights under international treaties relating to intellectual property, including, but not limited to, the Paris Convention for the Protection of Industrial Property and the Patent Cooperation Treaty, and to claim all rights of priority resulting from the filing of any of the foregoing or any future Patents based on the foregoing; all of the foregoing to be held and enjoyed by said Assignee, for its own use and behalf and the use and behalf of its

successors, legal representatives and assigns, to the full end of the term or terms of any and all Assigned Patents and Applications for which patents may be granted, as fully and entirely as the same would have been held and enjoyed by the Assignor, had this sale and assignment not been made. To the extent that Schedule A hereto contains any typographical or administrative error but it is clear which Patent was intended to be included in the sale, assignment, transfer and conveyance under this Assignment, the Assignor and the Assignee each acknowledge and agree that the intended Patent is hereby sold, assigned, transferred and conveyed, along with all other rights, privileges and claims enumerated above with respect to such intended Patent. Assignor, on behalf of itself, each of its current and future affiliates and any successors and assigns of any of the foregoing, agrees not to make any claim or argument in contravention of any of the foregoing.

- 2. Assignor shall, and shall cause its affiliates to, (a) execute, acknowledge and deliver all such further conveyances, notices, assumptions, releases and aquittances and such other instruments (including, but not limited, for recordation with the appropriate governmental authorities), and take such further actions, as may be necessary or appropriate to assign fully to Assignee and its successors and assigns, all of the properties, rights, titles, interests, estates, remedies, powers and privileges intended to be conveyed to Assignee under this Assignment, and (b) assist Assignee in connection with the prosecution, maintenance and/or enforcement of any Assigned Patents and Applications as requested by Assignee. If Assignee is unable for any reason to secure Assignor's or its affiliates or their respective successors' or assigns' signature to any document it is entitled to under this Assignment, Assignor and its affiliates hereby irrevocably designates and appoints Assignee, and Assignee's duly authorized officers, agents and representatives, as its agents and attorneys-in-fact, coupled with an interest, with full power of substitution to act for and on the behalf and instead of Assignor, to execute and file any such document or documents and to do all other lawfully permitted acts to further the purposes of this Assignment with the same legal force and effect as if executed by Assignor. Assignor and its affiliates shall not enter into any agreement in conflict with this Assignment.
- 3. The Assignor hereby authorizes the Commissioner of Patents and Trademarks in the United States Patent and Trademark Office, and the corresponding entities or agencies in any applicable foreign countries or multinational authorities, to record the Assignee as the assignee and owner of the Assigned Patents and Applications and to deliver to the Assignee, and to the Assignee's attorneys, agents, successors or assigns, all official documents and communications as may be warranted by this Assignment.
- 4. This Assignment will be governed by and construed in accordance with the laws of the State of California, excluding that body of California law concerning conflicts of law. The parties further submit to and waive any objections to the exclusive jurisdiction of and venue in any of the following forums: U.S. District Court for the Northern District of California, California Superior Court for Santa Clara County, or any other forum in Santa Clara County, for any litigation arising out of this Assignment.
- 5. If any term or other provision of this Assignment is determined by a court of competent jurisdiction to be invalid, illegal, or incapable of being enforced by any rule of law or public policy, all other terms, provisions and conditions of this Assignment shall nevertheless

remain in full force and effect and shall in no way be affected, impaired or invalidated. Upon such determination that any term or other provision is invalid, illegal, or incapable of being enforced, the parties shall negotiate in good faith to modify this Assignment so as to effect the original intent of the parties as closely as possible to the fullest extent permitted by applicable law in an acceptable manner to the end that this Assignment is fulfilled to the greatest extent possible.

6. This Assignment may be executed in multiple counterparts, each of which will be deemed to be an original copy of this Assignment and all of which, when taken together, will be deemed to constitute one and the same agreement. The exchange of a fully executed Assignment (in counterparts or otherwise) by electronic transmission in .PDF format or by facsimile shall be sufficient to bind the parties to the terms and conditions of this Assignment.

IN TESTIMONY WHEREOF,

Lighthouse Al, Inc.
Ву: 12-
Name: Alex Teichman
Title: (=0
Date: Dec 14, 2018

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.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

STATE OF CALIFORNIA)	
COUNTY OF Santa Cla) ss.	
On December 14, 2018 before m	ne. Shelley J. Miguel	, Notary Public,
personally appeared AIEX 7	Teichman _ Z	

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

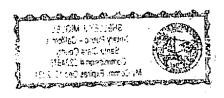
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal.

Shelley Meguel Signature of Notary Public

SHELLEY J. MIGUEL
Notary Public — California
Santa Clara County
Commission # 2224875
My Comm. Expires Dec 10, 2021

Place Notary Seal Above



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2.3.7			WHEREOF,

Apple Inc.

By:

Name: DEACK

TITLE: (MEG IT COUNSEL

Date: 12-20-2018

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.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

STATE OF CALIFORNIA

COUNTY OF Santa Clara

SS.

On Dec. 20, 20/8

before me,_

Kathryn Frances Hall

, Notary Public,

personally appeared

Jeffrey L. Myers

KATHRYN FRANCES HALL
Commission # 2129778
Notary Public - California
Santa Clara County
My Comm. Expires Oct 10, 2019

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/ase subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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

WITNESS my hand and official seal.

Place Notary Seal Above

Signature of Notary Public

SCHEDULE "A" to Assignment

Country	Application No.	Filing Date	Publication No.	Publication Date	Patent Number	Patent Date	\neg
S	14/813,907	30-Jul-15			9396400		Jul 19, 2016
SS	15/069,822	Mar 14, 2016	US 2017-0032192	2-Feb-17			
			A1				
WO	PCT/US2016/0444	Jul 28, 2016	WO 2017/019857	2-Feb-17			
	56						
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EP	16831346.8	28-Jul-16		.			
CN	201680051649.3	28-Jul-16	CN 108027874 A	11-May-18			
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S	15/297,644	19-Oct-16	US 2017-0039455	9-Feb-17			
			A1				

System For							
Method And			7-Sep-18	CN 108513078 A	Feb 24, 2018	201810156902.2	2
Conditions							
Low-Light							
Images Under							
Capture Video							
Camera To							
Depth-Sensing							
Emissions By A							
Using Light							-
System For	18						
Method And	29-Aug-	EP3367661			Feb 23, 2018	18158457.4	EP
Conditions					·		
Low-Light							
Images Under							
Capture Video							
Camera To							
Depth-Sensing			-				
Emissions By A							
Using Light	-	-					
System For	2018						
Method And	Jun 26,	10009554			Feb 24, 2017	15/442,290	SN
Authentication							
Visual	-						
System For	2018			A1			
Method And	May 8,	9965612	19-Oct-17	US 2017-0300685	Apr 19, 2016	15/132,513	S
Camera							
Using A Depth							
Security System							
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Two-Way Communication					20-Jun-17	15/628,236	Sn
System							
Monitoring							
Sharing In A							
Incident	•						
System For							
Method And					21-Jun-17	15/629,385	SS
System							
Monitoring							
Vision-Based							
Interface For							
Speech			7-Sep-18	CN 108509502 A	Feb 28, 2018	201810168053.2	S
System							
Monitoring							
Vision-Based							
Interface For				A1			
Speech			30-Aug-18	US-2018-0246964-	Feb 28, 2017	15/445,501	SS
	2018						
Camera	June 15,	ZL 201730393294.3		CN 304683879 S	Aug 24, 2017	201730393294.3	2
	2018						
Camera	June 15,	ZL 201730393292.4		CN 304683878 S	Aug 24, 2017	201730393292.4	S
Camera					Feb 24, 2017	29/595,085	S
Conditions							
Low-Light							
Images Under							
Capture Video							
Camera To							-: _
Depth-Sensing							
Emissions By A							
	Date		Date	-			
Title	Patent	Patent Number	Publication	Publication No.	Filing Date	Application No.	Country

Country	Application No.	Filing Date	Publication No.	Publication Date	Patent Number	Patent Date	Title
							1
							31.01.00
							Vision-Based
							Monitoring
							System

RECORDED: 02/20/2019