504659360 11/28/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4706082

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
	Corrective Assignment to correct the ASSIGNEE ADDRESS previously recorded on Reel 039112 Frame 0665. Assignor(s) hereby confirms the THE ASSIGNEE'S ENTIRE RIGHT, TITLE, AND INTEREST.

CONVEYING PARTY DATA

Name	Execution Date
SARMAD AZIZ MALIK	07/06/2016
ARVINDH KRISHNASWAMY	07/06/2016

RECEIVING PARTY DATA

Name:	APPLE INC.
Street Address:	1 INFINITE LOOP
City:	CUPERTINO
State/Country:	CALIFORNIA
Postal Code:	95014

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15206110

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ATTORNEY DOCKET NUMBER:	4860P27667
NAME OF SUBMITTER:	FARZAD E. AMINI
SIGNATURE:	/farzad e amini/
DATE SIGNED:	11/28/2017

Total Attachments: 5

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PATENT REEL: 044823 FRAME: 0023

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SARMAD AZIZ MALIK	07/06/2016
ARVINDH KRISHNASWAMY	07/06/2016

RECEIVING PARTY DATA

Name:	APPLE INC.
Street Address:	1 INFINITE LOOP
City:	CUPERTINO
State/Country:	ARKANSAS
Postal Code:	95014

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	15206110	

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unsuccessful, it will be sent via US Mail.

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ATTORNEY DOCKET NUMBER:	4860P27667US1
NAME OF SUBMITTER:	LINH-HAN HOANG NGUYEN
Signature:	/Linh-Han Hoang Nguyen/
Date:	07/08/2016

PATENT REEL: 044823 FRAME: 002/8/2016 4:23 PM **Total Attachments: 2**

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RECEIPT INFORMATION

EPAS ID: PAT3954360 **Receipt Date:** 07/08/2016

PATENT

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ASSIGNMENT OF PATENT APPLICATION

Attorney Docket No.: 4860P27667

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/we, the undersigned, Sarmad Aziz Malik; Arvindh Krishnaswamy

hereby sell, assign, and transfer to Apple Inc., a corporation of California

having a principal place of business at 1 Infinite Loop, Cupertino, California 95014, United States

("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all inventions or improvements that are disclosed in the application (provisional or non-provisional) for the United States patent which for the non-provisional application may have a declaration executed by the undersigned prior hereto or concurrently herewith and which application (provisional or non-provisional) is entitled

APPARATUS AND METHOD FOR LINEAR AND NONLINEAR ACOUSTIC ECHO CONTROL USING ADDITIONAL MICROPHONES COLLOCATED WITH A LOUDSPEAKER

said patent application also identified as follows (when known):

[I/we hereby authorize an attorney or agent for said Assignee to insert below the application number and filing date of said patent application when known.]

United :	States Patent Application Number	15/206,110
filed	7-8-2016	e.

and in and to said application (provisional or non-provisional) and all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said inventions or improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions or improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions or improvements and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

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

Inventor: Please S	Sign and Date Below:
7/6/1	G GOLGANIAN
Date	Name: Sarmad Aziz Malik
7/6/16	
Date	Name: Arvindh Krishnaswamy
Date	Name:
Date	Name;
Date	Name:

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