504632533 11/08/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4679251

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MICHELLE R. GOLDBERG	08/07/2017
KATHLEEN A. BERGERON	08/08/2017
PAUL X. WANG	08/09/2017
ALEX J. LEHMANN	08/09/2017
WILLIAM P. YARAK III	10/11/2017
KEVIN C. ARMENDARIZ	08/04/2017
ZHENG GAO	08/29/2017

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15681322

CORRESPONDENCE DATA

Fax Number: (303)223-1111

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: 303-223-1100

Email: patentdocket@bhfs.com

Correspondent Name: S. CRAIG HEMENWAY / APPLE INC.

Address Line 1: 410 SEVENTEENTH STREET

Address Line 2: SUITE 2200

Address Line 4: DENVER, COLORADO 80202

ATTORNEY DOCKET NUMBER:	P34129US1
NAME OF SUBMITTER:	ELISSA A. ASARO
SIGNATURE:	/Elissa A. Asaro/
DATE SIGNED:	11/08/2017

504632533 REEL: 044070 FRAME: 0771

Total Attachments: 7 source=P34129US1 Assignment#page1.tif source=P34129US1 Assignment#page2.tif source=P34129US1 Assignment#page3.tif source=P34129US1 Assignment#page4.tif source=P34129US1 Assignment#page5.tif source=P34129US1 Assignment#page6.tif source=P34129US1 Assignment#page7.tif

PATENT REEL: 044070 FRAME: 0772

ASSIGNMENT

WHEREAS, we, Michelle R. Goldberg, whose address is Five Infinite Loop, MS: 305-1PD, Cupertino, California 95014, Kathleen A. Bergeron, whose address is One Infinite Loop, MS: 306-3PD, Cupertino, California 95014, Paul X. Wang, whose address is One Infinite Loop, MS: 305-1PD, Cupertino, California 95014, Alex J. Lehmann, whose address is One Infinite Loop, MS: 87-2PD, Cupertino, California 95014, William P. Yarak III, whose address is One Infinite Loop, MS: 305-1DR, Cupertino, California 95014, Kevin C. Armendariz, whose address is One Infinite Loop, MS: 87-2PD, Cupertino, California 95014 and Zheng Gao, whose address is 1026 Lois Avenue, Sunnyvale, California 94087 (hereinafter, individually and collectively the "Assignor"), have invented certain new and useful systems, devices, and methods disclosed and described in a utility application for Letters Patent in the United States ("U.S."), titled "Low-Travel Illuminated Key Mechanism," which can be identified in the United States Patent and Trademark Office ("USPTO") by Application No. 15/681,322 , filed on August 18,2017 (the "Utility Application") with attorney docket no. P34129US1; and

WHEREAS, Assignor desires to assign any and all right, title and interest to said Utility Application, and any provisional, non-provisional, continuation, continuation-in-part, divisional, international, foreign, regional and convention applications corresponding thereto, and any and all Letters Patent of the United States and countries and regions foreign thereto which may grant or have granted thereto or be lodged in relation thereto, any reissue or reexamination thereof or to be obtained therefor, any renewals, or substitutes thereof, and any and all priority rights or priority claims, International Convention rights, any and all rights to collect past damages for infringement of any and all Letters Patent of the United States and countries and regions foreign thereto which may be published, which may grant, or have granted thereto or be lodged in relation thereto, and other benefits accruing to or to accrue to Assignor with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto (the "Patent Rights");

WHEREAS, Apple Inc., a corporation organized and existing under the laws of the State of California, and having its principal place of business at One Infinite Loop, Cupertino, California 95014 (the "Assignee"), desires to acquire any and all, right, title, and interest of Assignor in and to the invention(s), the Patent Rights, and in, to, and under any and all Letters Patent to be obtained therefor;

NOW THEREFORE, for the sum of \$1.00 and other good and valuable consideration to Assignor in hand paid, the receipt and sufficiency of which are hereby acknowledged, Assignor has sold, assigned, and transfer and by these presents does hereby sell, assign and transfer to the said Assignee, and said Assignee's legal representatives, successors and assigns, any and all of the entire right, title and interest in and to the invention(s), Patent Rights, and any and all Letters Patent to be obtained therefor;

UPON SAID CONSIDERATION, the Assignor hereby covenants and agrees with the said Assignee that it will not execute any writing or do any act whatsoever conflicting with these presents, and that it will, at any time upon request, without further or additional consideration, but at the expense of the said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, provisionals, non-provisionals, continuations, continuations-in-part, continuing prosecutions, divisionals, renewals, reissues, reexamined or extended Letters Patent of the United States, or of any and all foreign countries, on said Patent

Rights, and execute confirmatory assignments or acknowledgments of this assignment as necessary for full enjoyment of the Patent Rights and for recording in foreign patent offices, and in enforcing any rights or choses in action accruing as a result of such Patent Rights, by giving testimony in any proceedings or transactions involving such Patent Rights, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of both parties;

UPON SAID CONSIDERATION, Assignor represents and warrants that Assignor has the right, title, and authority to execute this Assignment and to convey any and all right, title, and interest in the Patent Rights, and that Assignor has not conveyed nor will convey hereafter all or part of the Patent Rights to a third party;

ASSIGNOR HEREBY AUTHORIZES said Assignee, its successors, and assigns, or anyone it may properly designate, to apply for Letters Patent in the U.S. and any and all foreign countries and regions, in its own name if desired, and additionally to claim priority to the filing date of the Utility Application and otherwise take advantage of the provisions of any international conventions.

ASSIGNOR HEREBY AUTHORIZES Assignee, its successors and assigns, or anyone it may properly designate, to insert in this instrument the application number, filing date, and title of the Utility Application once known.

IN WITNESS WHEREOF, the Assignor hereunto has executed this Assignment upon the date indicated below.

Date: 9/7/17	By: Michelle n Carlelly
	Witchelle R. Golberg
IN WITNESS WHEREOF, the Assignor the date indicated below.	hereunto has executed this Assignment upon
Date: 08 AKUST 2017	By: Kathleen A. Bergeron
IN WITNESS WHEREOF, the Assignor the date indicated below.	hereunto has executed this Assignment upon
Date:	By:Paul X. Wang
IN WITNESS WHEREOF, the Assignor the date indicated below.	Paul X. Wang hereunto has executed this Assignment upon
Date:	By: Alex J. Lehmann

Rights, and execute confirmatory assignments or acknowledgments of this assignment 39 necessary for full enjoyment of the Patent Rights and for recording in foreign patent offices, and in enforcing any rights or choses in action account as a result of such Patent Rights, by profit testimony in any proceedings or transactions involving such Patent Rights, and by executing preliminary statements and other affidavits. It being understood that the foregoing coverant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of both parties.

UPON SAID CONSIDERATION. Assignor represents and warrants that Assignor hills the right, title, and authority to execute this Assignment and to convey any end all right, title, and interest in the Patent Rights, and that Assignor has not conveyed nor will convey hereafter all or part of the Patent Rights to a third party.

ASSIGNOR HEREBY AUTHORIZES said Assignee its successors, and assigns, or anyone it may properly designate, to apply for Letters Patent in the U.S. and any and all foreign countries and regions, in its own name if desired, and additionally to dain priority to the filling date of the Utility Application and otherwise take advantage of the provisions of any international conventions.

ASSIGNOR HEREBY AUTHORIZES Assigned its successors and assigns, or anyone it may properly designate, to insert in this instrument the application number, filing date, and title of the Utility Application once known.

IN WITNESS WHEREOF, the Assignor hereunto has executed this Assignment upon the date indicated below.

Date	By Michelle F. Golberg
IN WITNESS WHEREOF the date indicated below	the Assignor hereunto has executed this Assignment upon
Date	By Kathisen A. Bergeron
IN WITNESS VHEREOF the case indicated below Date: 9-9-20-6	the Assignar hereunic has executed this Assignment upon the Assign
N ON THE SE WHENEON the calle indicated below	the Assignmentation in executed this Assignment upon
Date	Alex J. Lenmann
12.00	243

PATENT REEL: 044070 FRAME: 0775 Rights, and execute confirmatory assignments or acknowledgments of this assignment as necessary for full enjoyment of the Patent Rights and for recording in foreign patent offices, and in enforcing any rights or choses in action accruing as a result of such Patent Rights, by giving testimony in any proceedings or transactions involving such Patent Rights, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of both parties;

UPON SAID CONSIDERATION, Assignor represents and warrants that Assignor has the right, title, and authority to execute this Assignment and to convey any and all right, title, and interest in the Patent Rights, and that Assignor has not conveyed nor will convey hereafter all or part of the Patent Rights to a third party;

ASSIGNOR HEREBY AUTHORIZES said Assignee, its successors, and assigns, or anyone it may properly designate, to apply for Letters Patent in the U.S. and any and all foreign countries and regions, in its own name if desired, and additionally to claim priority to the filing date of the Utility Application and otherwise take advantage of the provisions of any international conventions.

ASSIGNOR HEREBY AUTHORIZES Assignee, its successors and assigns, or anyone it may properly designate, to insert in this instrument the application number, filing date, and title of the Utility Application once known.

IN WITNESS WHEREOF, the Assignor hereunto has executed this Assignment upon

the date indicated below.	hereunto has executed this Assignment upon By: William P Yarak III
, — — — — — — — — — — — — — — — — — — —	William P. Yarak III
IN WITNESS WHEREOF, the Assignor the date indicated below.	hereunto has executed this Assignment upon
Date:	Ву:
-	
	By: Kevin C. Armendariz
	Kevin C. Armendariz
IN WITNESS WHEREOF, the Assignor the date indicated below.	Kevin C. Armendariz hereunto has executed this Assignment upon

the date indicated below.	hereunto has executed this Assignment upon
Date:	By: William P. Yarak III
IN WITNESS WHEREOF, the Assignor the date indicated below. Date: 8/4/2017	hereunto has executed this Assignment upon By Kevin C. Armendariz
IN WITNESS WHEREOF, the Assignor the date indicated below. Date:	hereunto has executed this Assignment upon By:
	Zheng Gao

the date indicated below.	Heleditto Has executed this Assignment opon
Date:	By: William P. Yarak III
IN WITNESS WHEREOF, the Assignor the date indicated below.	hereunto has executed this Assignment upon
Date:	By; Kevin C. Armendariz
IN WITNESS WHEREOF, the Assignor the date indicated below. Date: $08/29/2017$	hereunto has executed this Assignment upon By: Zheng Gao