# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3454829

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
JOSHUA D. ATKINS	06/24/2015
TARUN PRUTHI	06/11/2015
ARAM M. LINDAHL	06/11/2015
VASU IYENGAR	06/11/2015
ASHRITH DESHPANDE	06/07/2015

### **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:	14732770

### CORRESPONDENCE DATA

**Fax Number:** (503)296-2172

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: 503-844-9009
Email: mail@ganzlaw.com
Correspondent Name: LLOYD L. POLLARD II
Address Line 1: P.O. BOX 2200

Address Line 2: GANZ POLLARD, LLC

Address Line 4: HILLSBORO, OREGON 97123

ATTORNEY DOCKET NUMBER: P27129US1/BEA-2.022.US

NAME OF SUBMITTER: MICHELLE J. TURNER

SIGNATURE: /Michelle J. Turner/

DATE SIGNED: 07/24/2015

**Total Attachments: 6** 

PATENT REEL: 036175 FRAME: 0312

503408195

For good and valuable consideration, receipt of which is hereby acknowledged, we, the undersigned, as inventors (hereafter "Assignor") of certain inventions (hereafter, the "Inventions") for which we are making an application, as follows:

For Letters Patent of The United States of America;
Entitled MICROPHONE-BASED ORIENTATION SENSORS AND RELATED
TECHNIQUES;
Filed on \_\_\_\_\_ June 7, 2015 \_\_\_\_;
Assigned Application Serial Number \_\_\_\_\_;
Identified by Attorney Docket No. P27129US1/ BEA-2.022.US of GANZ POLLARD, LLC, P.O. Box 2200, Hillsboro, Oregon 97123,

(Hereinafter referred to as the "Patent Application")

hereby sell, assign, and transfer unto

Apple Inc. of 1 Infinite Loop, Cupertino, California 95014, a for-profit corporation formed under the laws of the state of California, as Assignee,

for Assignee's own use and benefit, and for Assignee's successors and assigns, the entire right. title and interest, for all countries, in and to: (a) the Inventions; (b) the Patent Application(s) and all related patent rights; (c) any and all other provisional and non-provisional patent applications pertaining to said Inventions or the Patent Application(s) (the "Other Applications"); (d) any and all patent applications claiming priority to the Patent Application(s) and/or to the Other Applications, or from which the Patent Application(s) or the Other Applications claim priority, including international and foreign application (collectively, the "Priority Applications"); (e) any and all continuing applications of the Patent Application, the Other Applications and the Priority Applications (the "Continuing Applications"); (f) any and all reissues, re-examinations and/or extensions relating to or of the Patent Application(s), the Other Applications or the Priority Applications, including, without limitation, any and all renewals of and/or substitutes thereof (collectively, the "Extensions"); and (g) any and all rights and privileges that may be issued, granted or otherwise arise from, in any country, any and all said Inventions (such rights and privileges including, without limitation, any and all patent rights, other protections arising from patent applications, and other proprietary rights). Hereinafter, any and all of the Patent Application, Other Applications, Priority Applications, Continuing Applications and rights arising therefrom are collectively referred to as "Patent Family Rights."

If the U.S. Serial Number and filing date are unknown at the time of execution of this Assignment, Assignor authorizes any attorney listed with GANZ POLLARD LLC, or otherwise associated with USPTO Customer Number 130224, to insert where indicated above, the serial number and filing date of said application when known, and to make changes to the Attorney Docket No. listed herein.

Without limiting the generality of the foregoing, Assignor requests and agrees that any and all patents under Patent Family Rights shall issue to said Assignee, or to Assignee's

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successors and assigns, or to such nominee(s) as Assignee may designate, as the sole owner of the entire right, title and interest in and to any and all said patents and said inventions thereby patented. And Assignor grants Assignee a limited power of attorney to execute documents on Assignor's behalf to give effect to this provision in case Assignor is unavailable, deceased, incapacitated, or otherwise unable or unwilling to cooperate in the process of effecting a transfer of ownership, or recordation of ownership right(s) in the name of the Assignee.

Assignor agrees that, when requested, Assignor will, without charge to said Assignee but at Assignee's expense, execute additional assignments and all other writings, make all declarations and take all oaths, and do all other acts which Assignee reasonably may deem necessary, desirable or convenient (i) for perfecting, securing, maintaining, asserting, and enforcing any and all patent applications and patents for, and other rights and privileges relating to, said inventions and Patent Family Rights in any and all countries and (ii) for vesting the entire right, title and interest therein and thereto solely in said Assignee, its successors and assigns, or such nominee(s) as Assignee may designate. Assignor authorizes and empowers said Assignee, Assignee's successors and assigns, or such nominee(s) as Assignee may designate, to invoke and claim in any application in the Patent Family Rights, and in any and all other applications for patent or other form of protection for said inventions filed by or for it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any treaty or convention which may henceforth be substituted for or be an alternative to the Convention, and to invoke and claim such right of priority without further written or oral authorization from Assignor.

This Assignment grants said Assignee (or Assignee's successors and assigns, or nominee(s) as Assignee may designate) the sole right (a) to pursue in its own name any past, present, or future actions (including, without limitation, claims of infringement) based on any and all rights and privileges that may be issued, granted or otherwise arise from, or relate to, in any country, any and all said inventions (such rights and privileges including, without limitation, any and all patent rights, other protections arising from patent applications, and other proprietary rights) and (b) to exclusively retain any awards, settlements, or other remedies therefrom, as fully and as entirely as Assignor would have had the right to pursue and to retain had this assignment and sale not been made.

Assignor hereby consents that a copy of this Assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file, or like document which may be required in any country for any purpose and, more particularly, in proof of the right of said Assignee (or Assignee's successors and assigns, or nominee(s) as Assignee may designate) to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any treaty or convention which may henceforth be substituted for the Convention. Assignor covenants, with said Assignee, Assignee's successors and assigns, that the rights and property herein conveyed are free and clear of any encumbrance, and that Assignor has full right to convey the same as herein expressed.

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Assignor agrees that Assignor will not execute any assignment, encumbrance or other writing, or do any other act, that conflicts (a) with this Assignment or (b) without limiting the generality of the foregoing, with any provision set forth herein.

IN WITNESS WHEREOF, Assignor hereunto signed Assignor's names on the day and year set forth below.

JOSHUA D. ATRINS DATE DATE

TARUN PRUTHI DATE DATE

ARAM M. LINDAHL DATE

Van fyr 6/11/2015
VASU IYENGAR DATE

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for Assignee's own use and benefit, and for Assignee's successors and assigns, the entire right. title and interest, for all countries, in and to: (a) the Inventions; (b) the Patent Application(s) and all related patent rights; (c) any and all other provisional and non-provisional patent applications pertaining to said Inventions or the Patent Application(s) (the "Other Applications"); (d) any and all patent applications claiming priority to the Patent Application(s) and/or to the Other Applications, or from which the Patent Application(s) or the Other Applications claim priority, including international and foreign application (collectively, the "Priority Applications"); (e) any and all continuing applications of the Patent Application, the Other Applications and the Priority Applications (the "Continuing Applications"); (f) any and all reissues, re-examinations and/or extensions relating to or of the Patent Application(s), the Other Applications or the Priority Applications, including, without limitation, any and all renewals of and/or substitutes thereof (collectively, the "Extensions"); and (g) any and all rights and privileges that may be issued, granted or otherwise arise from, in any country, any and all said Inventions (such rights and privileges including, without limitation, any and all patent rights, other protections arising from patent applications, and other proprietary rights). Hereinafter, any and all of the Patent Application, Other Applications, Priority Applications, Continuing Applications and rights arising therefrom are collectively referred to as "Patent Family Rights."

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Assignor agrees that, when requested, Assignor will, without charge to said Assignee but at Assignee's expense, execute additional assignments and all other writings, make all declarations and take all oaths, and do all other acts which Assignee reasonably may deem necessary, desirable or convenient (i) for perfecting, securing, maintaining, asserting, and enforcing any and all patent applications and patents for, and other rights and privileges relating to, said inventions and Patent Family Rights in any and all countries and (ii) for vesting the entire right, title and interest therein and thereto solely in said Assignee, its successors and assigns, or such nominee(s) as Assignee may designate. Assigner authorizes and empowers said Assignee, Assignee's successors and assigns, or such nominee(s) as Assignee may designate, to invoke and claim in any application in the Patent Family Rights, and in any and all other applications for patent or other form of protection for said inventions filed by or for it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any treaty or convention which may henceforth be substituted for or be an alternative to the Convention, and to invoke and claim such right of priority without further written or oral authorization from Assignor.

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JOSHUA D. ATKINS	DATE
TARUN PRUTHI	DATE
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VASU LYENGAR	DATE
Adill-	96/07/2015
ASHRITH DESHPANDE	DATE

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> PATENT REEL: 036175 FRAME: 0319

year set forth below.