504765193 02/06/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
XIAOYUAN TU	01/10/2018
ALEXANDER SINGH ALVARADO	01/31/2018
ADAM HOWELL	01/31/2018
ANIL KANDANGATH	02/05/2018

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:	15700400

CORRESPONDENCE DATA

Fax Number:

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: 617-406-6000

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Correspondent Name: DLA PIPER LLP (US)
Address Line 1: 11911 FREEDOM DR.
Address Line 4: RESTON, VIRGINIA 20190

ATTORNEY DOCKET NUMBER:	337722-653001
NAME OF SUBMITTER:	KRISTOFFER W. LANGE
SIGNATURE:	/Kristoffer W. Lange/
DATE SIGNED:	02/06/2018

Total Attachments: 8

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ASSIGNMENT OF APPLICATION

WHEREAS, we,

Xiaoyuan TU, Alexander SINGH ALVARADO, Adam HOWELL and Anil KANDANDATH,

respectively; have invented certain new and useful improvements in: "DETERMINING VEHICLE ORIENTATION FOR ENHANCED INITIAL NAVIGATION EXPERIENCE" (hereinafter referred to as the "Invention"), for which an application for Letters Patent was filed on September 11, 2017 Application No. 15/700,400 (the "Application");

WHEREAS, <u>Apple Inc.</u>, (hereinafter referred to as "ASSIGNEE"), having a place of business at 1 Infinite Loop, Cupertino, California 95014, is desirous of acquiring the full and exclusive right in and to said Invention, the Application and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, for good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, we, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right in and to said Invention and said Application in the United States and its territorial possessions and in any and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all subsequent applications based thereon including any and all non-provisional applications, divisions, continuations, substitutions, renewals and reissues thereof together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres.

We hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and in any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of our entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE and said ASSIGNEE's successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by us had this Assignment and sale not been made.

Further, we agree that we will communicate to said ASSIGNEE or said ASSIGNEE's representatives any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally, do everything possible to aid

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The undersigned hereby grant(s) the firm of DLA Piper LLP US, Attorneys at Law, 33 Arch Street, 26th Floor, Boston, Massachusetts 02110-1447, the power to insert on this Assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Date: 1/10/2018	Mich
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	Alexander SINGH ALVARADO
Date:	
	Adam HOWELL
Date:	
	Anil KANDANDATH

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Date: _		
		Xiaoyuan TU
Date: _	1/31/2018	Alex Singh Alvarabo Alexander SINGH ALVARADO
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Date: _		
		Adam HOWELL
Date: _		
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Date: 2/5/2018	Wykning
	Anil KANDANGATH

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RECORDED: 02/06/2018