

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT												
NATURE OF CONVEYANCE:	Corrective Assignment to correct the incorrect Assignors Damian Kaleta and Kevin Decker. The CORRECT ASSIGNORS are Imran A. Pirwani and Paul S. McCarthy previously recorded on Reel 028906 Frame 0699. Assignor(s) hereby confirms the Assignment of Assignor's interest.												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Imran A. Pirwani</td> <td>08/31/2012</td> </tr> <tr> <td>Paul S. McCarthy</td> <td>08/31/2012</td> </tr> </tbody> </table>		Name	Execution Date	Imran A. Pirwani	08/31/2012	Paul S. McCarthy	08/31/2012						
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Imran A. Pirwani	08/31/2012												
Paul S. McCarthy	08/31/2012												
RECEIVING PARTY DATA													
<table border="1"> <tr> <td>Name:</td> <td>Apple Inc.</td> </tr> <tr> <td>Street Address:</td> <td>1 Infinite Loop</td> </tr> <tr> <td>Internal Address:</td> <td>MS-303-1NS</td> </tr> <tr> <td>City:</td> <td>Cupertino</td> </tr> <tr> <td>State/Country:</td> <td>CALIFORNIA</td> </tr> <tr> <td>Postal Code:</td> <td>95014</td> </tr> </table>		Name:	Apple Inc.	Street Address:	1 Infinite Loop	Internal Address:	MS-303-1NS	City:	Cupertino	State/Country:	CALIFORNIA	Postal Code:	95014
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CORRESPONDENCE DATA													
Fax Number: 4155760300 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> Phone: 415-576-0200 Email: jhockaday@kilpatricktownsend.com Correspondent Name: Kilpatrick Townsend & Stockton, LLP Address Line 1: Two Embarcadero Center, Eighth Floor Address Line 4: San Francisco, CALIFORNIA 94111-3834													
ATTORNEY DOCKET NUMBER:	90911-P13452US1-844481												
NAME OF SUBMITTER:	Athena C. Johns												

OP \$40.00 13601689

Total Attachments: 4

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
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Fax Number:	4155760300										
Phone:	415.576.0200										
Email:	Jtipton@kilpatricktownsend.com										
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>											
Correspondent Name:	Kilpatrick Townsend & Stockton LLP										
Address Line 1:	2 Embarcadero Center										
Address Line 2:	8th Floor										
Address Line 4:	San Francisco, CALIFORNIA 94111-3834										
ATTORNEY DOCKET NUMBER:	90911-P13452US1-844481										

PATENT

REEL: 029495 FRAME: 0240

NAME OF SUBMITTER:	Athena C. Johns
Signature:	/Athena C. Johns/
Date:	09/06/2012
Total Attachments: 1 source=Assignment#page1.tif	
RECEIPT INFORMATION EPAS ID: PAT2088037 Receipt Date: 09/06/2012 Fee Amount: \$40	

PATENT

REEL: 029495 FRAME: 0241



UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

SEPTEMBER 7, 2012

PTAS

KILPATRICK TOWNSEND & STOCKTON LLP
2 EMBARCADERO CENTER
8TH FLOOR
SAN FRANCISCO, CA 94111-3834

502050132

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT RECORDATION BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE ASSIGNMENT RECORDATION BRANCH AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT RECORDATION BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 09/06/2012

REEL/FRAME: 028906/0699
NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

DOCKET NUMBER: 90911-P13452US1-844481

ASSIGNOR:

KALETA, DAMIAN

DOC DATE: 08/24/2012

ASSIGNOR:

DECKER, KEVIN

DOC DATE: 08/24/2012

ASSIGNEE:

APPLE INC.

1 INFINITE LOOP

CUPERTINOO, CALIFORNIA 95014

APPLICATION NUMBER: 13601689

FILING DATE:

PATENT NUMBER:

ISSUE DATE:

TITLE: ROAD HEIGHT GENERATION FOR A ROAD NETWORK

ASSIGNMENT RECORDATION BRANCH
PUBLIC RECORDS DIVISION

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, Imran A. Pirwani, residing at Campbell, CA and, Paul S. McCarthy, residing at San Jose, CA, hereinafter referred to as "Assignors," are the joint inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: ROAD HEIGHT GENERATION FOR A ROAD NETWORK

Date(s) of execution of Declaration:

Filing Date: August 31, 2012

Application No.: 13/601,689
; and

WHEREAS, APPLE INC., a corporation of the state of California, located at 1 Infinite Loop, Cupertino, CA 95014, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignors, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

Assignors hereby authorize and request Kilpatrick Townsend & Stockton LLP, Two Embarcadero Center, Eighth Floor, San Francisco, CA 94111-3834, to insert herein above the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: August 31, 2012

Dated: August 31, 2012

Imran A. Pirwani

Paul S. McCarthy

Kilpatrick Townsend 64516942 1