502704772 03/04/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2751378

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
AJOY K. SINGH	02/19/2014
VINAY R. MAJJIGI	02/19/2014
CHRISTIAN W. MUCKE	02/19/2014
TARIK TABET	02/19/2014
PAUL V. FLYNN	02/19/2014

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:	14187988

CORRESPONDENCE DATA

 Fax Number:
 (408)341-3098

 Phone:
 (408) 341-3000

 Email:
 aliu@wcsr.com

Correspondence will be sent via US Mail when the email attempt is unsuccessful.

Correspondent Name: WOMBLE CARLYLE SANDRIDGE & RICE LLP

Address Line 1: 10050 NORTH WOLFE ROAD, SUITE 260

Address Line 4: CUPERTINO, CALIFORNIA 95014

	DATENT
NAME OF SUBMITTER:	MICHAEL J. FERRAZANO
ATTORNEY DOCKET NUMBER:	P18937US1/17260US.1

PATENT 502704772 REEL: 032343 FRAME: 0461

Signature:	/Michael J. Ferrazano/
Date:	03/04/2014
Total Attachments: 5 source=P18937US1_ASSIGNMENTS#page source=P18937US1_ASSIGNMENTS#page source=P18937US1_ASSIGNMENTS#page source=P18937US1_ASSIGNMENTS#page source=P18937US1_ASSIGNMENTS#page	e2.tif e3.tif e4.tif

PATENT REEL: 032343 FRAME: 0462

Whereas I, an undersigned inventor, have invented certain new and useful improvements as set forth in the patent application entitled:

REDUNDANT TRANSMISSION OF REAL TIME DATA

(Atty. Docket No. P18937US1/17260US.1)
☐ for which I have executed a U.S. patent application on even date herewith. ■ which bears U.S. application No
For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, an undersigned inventor, hereby:
Sell, assign and transfer to Apple Inc., a California corporation having a place of business at Infinite Loop, Cupertino, CA 95014 ("ASSIGNEE"), the entire right, title and interest in any and all improvements and inventions disclosed in, applications based upon, and patents granted upon (including foreign patents and the right to claim priority), the above-referenced application.
Authorize and request the Commissioner of Patents to issue any and all United States Paten resulting from said application or any divisional, continuation, substitute, renewal, re-examination reissue thereof to the ASSIGNEE.
Agree to execute all papers and documents and, entirely at the ASSIGNEE's expense, perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative applications thereof, foreign applications based thereon, and/other enforcement of patents resulting from such applications.
Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon the nventor, as well as the inventor's heirs, legal representatives and assigns.
Warrant and represent that I have not entered and will not enter into any assignment, contract, or understanding that conflicts with this assignment.
Authorize and request my attorney/agent to insert above the application No. in order to assist with recordal of this assignment.
Signed on the date indicated beside my signature.
Signature: Ajoy K. SINGH Signature: Date: 2/19/14

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REDUNDANT TRANSMISSION OF REAL TIME DATA

(Atty. Docket No. P18937US1/17260US.1)
☐ for which I have executed a U.S. patent application on even date herewith. ☐ which bears U.S. application No14/187,988 ☐ which is a U.S. provisional application.
For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, an undersigned inventor, hereby:
1) Sell, assign and transfer to Apple Inc., a California corporation having a place of business at 1 Infinite Loop, Cupertino, CA 95014 ("ASSIGNEE"), the entire right, title and interest in any and all improvements and inventions disclosed in, applications based upon, and patents granted upon (including foreign patents and the right to claim priority), the above-referenced application.
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Signed on the date indicated beside my signature.
Signature: Date: 2/19/2014 Typed Name: Vinay R MAJJIGI

(Atty, Docket No. P18937US1/17260US.1)

PATENT REEL: 032343 FRAME: 0464

v1.0

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Signed on the date indicated beside my signature.
Signature:
Typed Name: Christian W. MUCKE Culum 3/3/2019

(Atty. Docket No. P18937US1/17260US.1)

0.17

Whereas I, an undersigned inventor, have invented certain new and useful improvements as set forth in the patent application entitled;

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6) Authorize and request my attorney/agent to insert above the application No. in order to assist with recordal of this assignment.
Signed on the date indicated beside my signature.
Signature: Date: 02/19//4 Typed Name: Tarik TABET

(Atty. Docket No. P18937US1/17260US.1)

PATENT **REEL: 032343 FRAME: 0466**

vE9

Whereas I, an undersigned inventor, have invented certain new and useful improvements as set forth in the patent application entitled:

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6) Authorize and request my attorney/agent to insert above the application No. in order to assist with recordal of this assignment.
Signed on the date indicated beside my signature.
Signature: Date: 2/9/4 Paul V. FLYNN

(Atty. Docket No. P18937US1/17260US.1)

v1.0**PATENT**