PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3027321

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BRETT W. DEGNER	09/15/2014
CAITLIN ELIZABETH KALINOWSKI	06/17/2014
RICHARD D. KOSOGLOW	06/25/2014
JOSHUA D. BANKO	08/09/2014
DAVID H. NARAJOWSKI	06/16/2014
JONATHAN L. BERK	06/10/2014
MICHAEL E. LECLERC	07/22/2014
MICHAEL D. MCBROOM	06/24/2014
ASIF IQBAL	06/10/2014
PAUL S. MICHELSEN	06/16/2014
MARK K. SIN	06/18/2014
PAUL A. BAKER	06/10/2014
HAROLD L. SONTAG	06/11/2014
WAI CHING YUEN	08/04/2014
MATTHEW P. CASEBOLT	06/10/2014
KEVIN S. FETTERMAN	06/10/2014
ALEXANDER C. CALKINS	06/18/2014
DANIEL L. MCBROOM	06/10/2014

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:	14297574

CORRESPONDENCE DATA

Fax Number: (408)341-3098

PATENT

502980721 REEL: 033762 FRAME: 0369

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: 408-341-3041 **Email:** rmena@wcsr.com

Correspondent Name: WOMBLE CARLYLE SANDRIDGE & RICE, LLP

Address Line 1: ATTN: IP DOCKETING, P.O. BOX 7037
Address Line 4: ATLANTA, GEORGIA 30357-0037

ATTORNEY DOCKET NUMBER:	P20728US1/17830US.1
NAME OF SUBMITTER:	MICHAEL J. FERRAZANO
SIGNATURE:	/Michael J. Ferrazano/
DATE SIGNED:	09/17/2014

Total Attachments: 18

source=P20728US1Z ASSIGNMENT EXECUTED#page1.tif source=P20728US1Z ASSIGNMENT EXECUTED#page2.tif source=P20728US1Z ASSIGNMENT EXECUTED#page3.tif source=P20728US1Z ASSIGNMENT EXECUTED#page4.tif source=P20728US1Z ASSIGNMENT EXECUTED#page5.tif source=P20728US1Z ASSIGNMENT EXECUTED#page6.tif source=P20728US1Z ASSIGNMENT EXECUTED#page7.tif source=P20728US1Z_ASSIGNMENT_EXECUTED#page8.tif source=P20728US1Z ASSIGNMENT EXECUTED#page9.tif source=P20728US1Z ASSIGNMENT EXECUTED#page10.tif source=P20728US1Z ASSIGNMENT EXECUTED#page11.tif source=P20728US1Z ASSIGNMENT EXECUTED#page12.tif source=P20728US1Z ASSIGNMENT EXECUTED#page13.tif source=P20728US1Z ASSIGNMENT EXECUTED#page14.tif source=P20728US1Z ASSIGNMENT EXECUTED#page15.tif source=P20728US1Z ASSIGNMENT EXECUTED#page16.tif source=P20728US1Z_ASSIGNMENT_EXECUTED#page17.tif source=P20728US1Z ASSIGNMENT EXECUTED#page18.tif

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

COMPUTER INTERNAL ARCHITECTURE

(Atty. Docket No. P20728US1/17830US.1)
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Signed on the date indicated beside my signature.
Signature: Work W. Wayum Date: 9-15-14 Typed Name: Breat W. DEGNER

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Signed on the date indicated beside my signature.
Signature: Date: 17 Jug 2014 Typed Name: Caidin Elizabeth KALINOWSKI

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Signed on the date indicated beside my signature.
Signature: Date: 4/25/14 Typed Name: Nochard D. Kosok Low

(Atty. Docket No. P20728US1/17830US.1)

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Signature: Date: 8/9/14 Date: 8/9/14

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Signed on the date indicated beside my signature.
Signature: David H. NARAJOWSKI Date: David H. NARAJOWSKI

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Signed on the date indicated beside my signature.
Signature: Date: 6/10/14/ Typed Name: Jonstham L. BERK

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Signed on the date indicated beside my signature.
Signature: Typed Name: Michael E. LECLERC ELLE Date: 7/22/14

(Atty, Docket No. P20728US1/17830US.1)

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Signed on the date indicated beside my signature.
Signature: Date: 6-24-/4 Typed Name: Michael D. MCBROOM

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Signed on the date indicated beside my signature.
Signature: Acif Qb at Date: 6/10/14 Typed Name: AsiftQBAL

(Any. Docket No. P20728US1/17830US.1)

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Signed on the date indicated beside my signature.
Signature: Date: 6/16/2014 Typod Name: Paul S. MICHELSEN

(Atty. Docket No. P20728US1/17830US.1)

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Signature: Mark K. SIN Date: 6/18/14

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Signature:	Pare Bai
Typed Name:	Paul A. BAKER

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Signed on the date indicated by side my signature.
Signature: /////// Jorg Date: 6/11/2014
Typed Name: Harold L. SONTAG

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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.
2) Authorize and request the Commissioner of Patents to issue any and all United States Patents resulting from said application or any divisional, continuation, substitute, renewal, re-examination or reissue thereof to the ASSIGNEE.
3) 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/or the enforcement of patents resulting from such applications.
4) 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 inventor, as well as the inventor's heirs, legal representatives and assigns.
5) Warrant and represent that I have not entered and will not enter into any assignment, contract, or understanding that conflicts with this assignment.
6) Authorize and request my attorney/agent to insert above the application No. in order to assist with recordal of this assignment.
Signature: Typed Name: Matthew P. CASEBOLT Date: U 10 Ze 14

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

COMPUTER INTERNAL ARCHITECTURE

(Atty, Docket No. P20728US1/17830US.1) for which I have executed a U.S. patent application on even date herewith. which bears U.S. application No. 14/297,574 which is a U.S. provisional application.
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Signed on the date indicated beside my signature. Signature: Levin S. FETTERMAN Date: Clipton

(Atty. Docket No. P20728US1/17830US.1)

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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: AK Chi Date: 06/18/14 Typed Name: Alexander C. CALKINS

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

COMPUTER INTERNAL ARCHITECTURE

(Atty. Docke	No. P20728U	S1/17830US.1)			
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(Atty. Docket No. P20728US1/17830US.1)

RECORDED: 09/17/2014