PATENTS	
To the Director of the U.S. Patent and Trademark Office: Please	
1. Name of conveying party(ies):	Name and address of receiving party(ies)
Steven Porter HOTELLING (9/9/2009) and Christoph Horst KRAH (9/9/2009)	Name: Apple Inc.
	Internal Address:
Additional name(s) of conveying party(les) attached?	Street Address:
3. Nature of conveyance/Execution Date(s):	
Execution Date(s): In parentheses after inventor name	1 Infinite Loop
Assignment Merger Change of Name	
Security Agreement Joint Research Agreement	City:Cupertino
Government Interest Assignment	State: California
Executive Order 9424, Confirmatory License	
	Country: United States of America Zip: 95014 Additional name(s) & address(es) Ves X No.
Other	Additional name(s) & address(es) Yes X No attached?
4. Application or patent number(s):	Fhis document is being filed together with a new application.
A. Patent Application No.(s)	B. Patent No.(s)
This application 12/558, 374	
Filed: September 11, 2009	
Additional numbers attached?	Yes XNo
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and 1
Name: Glenn M. Kubota	
MORRISON & FOERSTER LLP	7. Total fee (37 CFR 1,21(h) & 3.41) \$40.00
Internal Address: Atty. Dkt.: 106842029200	
Street Address: 555 West Fifth Street	X Authorized to be charged to deposit account
	Enclosed
	None required (government interest not affecting
City: Los Angeles State: CA Zip: 90013-1024	B. Payment Information
State: CA Zip: 90013-1024 Phone Number: (213) 892-5752	
Pax Number: (213) 892-5454	Deposit Account Number 03-1952
Email Address: GKubota@mofo.com	Authorized User Name Glenn M. Kubota
9. Signature:	
Pro-	September 11, 2009
Şignalure	Date
Glenn M. Kubota - 44,197	Total number of pages including cover 4 sheet, attachments, and documents:
Name of Person Signing	andor, attaionnenia, enti docementa.
····	<u> </u>
I hereby certify that this paper is being transmitted by facelinite to the Paten shown below.	
Dated: September 11, 2009 Signature:	attendy Battle

Attorney Docket No.: 106842029200

ASSIGNMENT JOINT

THIS ASSIGNMENT, by Steven Porter **HOTELLING** and Christoph Horst **KRAH**, each having a post office address at c/o Apple Inc., 1 Infinite Loop, Cupertino, California 95014, US, (hereinafter referred to as the assignors), witnesseth:

WHEREAS, said assignors have invented certain new and useful improvements in TOUCH CONTROLLER WITH IMPROVED ANALOG FRONT END, set forth in an application for Letters Patent of the United States, and (check all that apply)

\boxtimes	having an oath or declaration executed on even date herewith;		
	that was filed on	as U.S. Patent Application No.	
	which is a nonprovisional of on ; and	U.S. Provisional Application No.	filed

WHEREAS, APPLE INC., a corporation duly organized under and pursuant to the laws of the State of California, and having its principal place of business at 1 Infinite Loop, Cupertino, California 95014, US (hereinafter referred to as the assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said application for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thercon:

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, said assignors have sold, assigned, transferred and set over, and by these presents does sell, assign, transfer and set over, unto said assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all provisionals, divisions, continuations and continuations-inpart of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to he held and enjoyed by said assignce, for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the assignors, had this sale and assignment not been made.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, said assignors are the sole and lawful owner of the entire right, title and interest in and to said inventions and the application for Letters Patent above-mentioned, and that the same are unencumbered and that said assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal representatives and assigns, that said assignors will, whenever counsel of said assignee, or the counsel of its successor, legal representatives and assigns, shall advise that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said inventions in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent or any reissue or extension of any Letters

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Client Ref No.: P7624US1

PATENT REEL: 023224 FRAME: 0497

1

Attorney Docket No.: 106842029200

Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said inventions, without charge to said assignee, its successors, legal representatives and assigns, but at the cost and expense of said assignee, its successors, legal representatives and assigns.

AND said assigners hereby request the Commissioner of Patents to issue said Letters Patent of the United States to said assignee as the assignee of said inventions and the Letters Patent to be issued thereon for the sole use of said assignee, its successors, legal representatives and assigns.

The Undersigned hereby grant(s) the practitioners at Customer Number: 69753,

all of Morrison & Foerster LLP and Apple Inc., the power to insert on this assignment any further identification 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, including the power to insert here in parentheses (Application number , filed) the application number and filing date of said application when

known.

Date

Steven Porter HOTELLING

anglash Itast Ugal

Christoph H Assignor

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RECORDED: 09/11/2009

Client Ref No.: P7624US1

PATENT REEL: 023224 FRAME: 0498

2