OMB No. 0651-0027 (exp. 03/31/2009)	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office
RECORDATION FOR	RM COVER SHEET
PATENT	S ONLY
To the Director of the U.S. Patent and Trademark Office; Please	e record the attached documents or the new address(es) below.
Name of conveying party(ies):	2. Name and address of receiving party(ies)
Steven Porter HOTELLING (8/19/2009); Marduke YOUSEFPOR (8/18/2009), Shih Chang CHANG	Name: Apple Inc.
(8/20/2009)	Internal Address:
Additional name(s) of conveying party(les) attached? Yes X No	Street Address:
3. Nature of conveyance/Execution Date(s):	
Execution Date(s): in parentheses after inventor name	1 Infinite Loop
x Assignment Merger Change of Name	
Security Agreement Joint Résearch Agreement	City: Cupertino
Government Interest Assignment	State: California
Executive Order 9424, Confirmatory License	Country: United States of America Zip: 95014
Other	Additional name(s) & address(es) Yes X No attached?
4. Application or patent number(s):	This document is being filed together with a new application.
A. Patent Application No.(s)	B. Patent No.(s)
Application No. 12/545,557 Filed:	
Additional numbers attached	? Yes X No
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Name: Glenn M. Kubota	
MORRISON & FOERSTER LLP	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
Internal Address: Atty. Dkt.: 106842028100	
Street Address: 555 West Fifth Street	X Authorized to be charged to deposit account
	Enclosed
	None required (government interest not affecting (itle)
City: Los Angeles	8. Payment Information
State: CA Zip: 90013-1024	
Phone Number: (213) 892-5752	
Fax Number: (213) 892-5454	Deposit Account Number03-1952_
Email Address: GKubota@mofo.com	Authorized User Name Glenn M. Kubota
9. Signature:	
British	August 21, 2009
Signature	Date
Glenn M. Kubota - 44,197	Total number of pages including cover 4
Name of Person Signing	sheet, attachments, and documents:

P7479US1

la-1042146

700416073

PATENT REEL: 023132 FRAME: 0670

Attorney Docket No.: 106842028100

ASSIGNMENT JOINT

THIS ASSIGNMENT, by Steven Porter HOTELLING, Marduke YOUSEFPOR and Shih Chang CHANG, 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 DUAL CONFIGURATION FOR DISPLAY DATA LINES, set forth in an application for Letters Patent of the United States, and

\boxtimes	having an oath or declaration execute	d on even date herewith;
		as U.S. Patent Application No Provisional Application Nos. 61/149,267 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 thereon:

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 be held and enjoyed by said assignee, 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 Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do

Client Ref No.: P7479US1

1

Attorney Docket No.: 106842028100

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 assignors 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,

which may be necessary office for recordation of	ter LLP and Apple Inc., the power to insert on this assignment any further identification or desirable in order to comply with the rules of the United States Patent and Trademark this document, including the power to insert here in parentheses (Application number filed) the application number and filing date of said application wher
known.	
Date	Steven Porter HOTELLING Assignor
08-18-2009 Date	Marduke YOUSEPWOR Assignor
Date	Shih Chang CHANG Assignor

when

Attorney Docket No.: 106842028100

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 assignors 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,

which may be necess:	rster LLP and Apple Inc., the power to insert on this assignment any further identificary or desirable in order to comply with the rules of the United States Patent and Trade of this document, including the power to insert here in parentheses (Application number and filing date of said application number and filing date of said application	mark er
known.		
8 /19/09 Date	Steven Porter HOTELLING Assignor	
Date	Marduke YOUSEFPOR Assignor	
8 /20/09 Date	Shih Chang CHANG Assignor	

2

la-1041360

RECORDED: 08/21/2009

Client Ref No.: P7479US1

PATENT REEL: 023132 FRAME: 0673