

## PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Shih Chang CHANG</td><td>05/24/2011</td></tr><tr><td>Cheng-Ho YU</td><td>05/24/2011</td></tr><tr><td>Zhibing GE</td><td>05/24/2011</td></tr><tr><td>Hopil BAE</td><td>05/24/2011</td></tr></tbody></table>	Name	Execution Date	Shih Chang CHANG	05/24/2011	Cheng-Ho YU	05/24/2011	Zhibing GE	05/24/2011	Hopil BAE	05/24/2011	
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<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>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	City:	Cupertino	State/Country:	CALIFORNIA	Postal Code:	95014	
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PROPERTY NUMBERS Total: 1											
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>PCT Number:</td><td>US1137810</td></tr></tbody></table>	Property Type	Number	PCT Number:	US1137810							
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PCT Number:	US1137810										
CORRESPONDENCE DATA											
Fax Number: (213)892-5454 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
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Address Line 4: Los Angeles, CALIFORNIA 90013-1024											
ATTORNEY DOCKET NUMBER:	10684-20433.40										
NAME OF SUBMITTER:	Glenn M. Kubota										
Total Attachments: 2 source=2043340_Assignment_6_1_11#page1.tif source=2043340_Assignment_6_1_11#page2.tif											

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PATENT  
REEL: 026372 FRAME: 0335

**WORLDWIDE PATENT ASSIGNMENT  
JOINT**

THIS ASSIGNMENT, by **Shih Chang CHANG, Cheng-Ho YU, Zhibing GE and Hopil BAE**, 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 **WRITING DATA TO SUB-PIXELS USING DIFFERENT WRITE SEQUENCES** set forth in an International (PCT) application bearing International Application No. \_\_\_\_\_ and filed on \_\_\_\_\_.

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 international application and any 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-in-part 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 joint and lawful owners 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 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 issuance of said Letters Patent of the United States and/or foreign countries 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.

"I hereby authorize and request the assignee's attorneys, Morrison & Foerster LLP, to insert here in parentheses (Application number \_\_\_\_\_, filed \_\_\_\_\_) the application number and filing date of said application when known."

5/24/2011  
Date

Shih Chang Chang  
**Shih Chang CHANG**  
Assignor

5/24/2011  
Date

Cheng Ho Yu  
**Cheng-Ho YU**  
Assignor

5/24/11  
Date

Zhibing Ge  
**Zhibing GE**  
Assignor

5/24/2011  
Date

Hopil BAE  
**Hopil BAE**  
Assignor