

# PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
<b>CONVEYING PARTY DATA</b>											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Thomas Murphy</td> <td>07/28/2009</td> </tr> <tr> <td>Kevin Rathburn</td> <td>07/28/2009</td> </tr> <tr> <td>Keen Hun Leong</td> <td>07/28/2009</td> </tr> </tbody> </table>		Name	Execution Date	Thomas Murphy	07/28/2009	Kevin Rathburn	07/28/2009	Keen Hun Leong	07/28/2009		
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Name:</td> <td>Avago Technologies ECBU IP (Singapore) Pte. Ltd.</td> </tr> <tr> <td>Street Address:</td> <td>No. 1 Yishun Avenue 7</td> </tr> <tr> <td>City:</td> <td>Singapore</td> </tr> <tr> <td>State/Country:</td> <td>SINGAPORE</td> </tr> <tr> <td>Postal Code:</td> <td>768923</td> </tr> </table>		Name:	Avago Technologies ECBU IP (Singapore) Pte. Ltd.	Street Address:	No. 1 Yishun Avenue 7	City:	Singapore	State/Country:	SINGAPORE	Postal Code:	768923
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<b>PROPERTY NUMBERS Total: 1</b>											
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<b>CORRESPONDENCE DATA</b>											
<p>Fax Number: (970)288-0617  <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 970-288-0731        Email: avagoip@system.foundationip.com        Correspondent Name: Kathy Manke Avago Technologies Limited        Address Line 1: 4380 Ziegler Road        Address Line 4: Fort Collins, COLORADO 80525</p>											
ATTORNEY DOCKET NUMBER:	2009-048USORG										
NAME OF SUBMITTER:	Thomas F. Woods										
<p>Total Attachments: 2        source=Assignment Avago Technologies 2009-048USORG (P AVG 307) 08 25 09#page1.tif        source=Assignment Avago Technologies 2009-048USORG (P AVG 307) 08 25 09#page2.tif</p>											

CH \$40.00 12547354

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**PATENT**  
 REEL: 023144 FRAME: 0613

When recorded please return to:

AVAGO TECHNOLOGIES, LTD.  
4380 Ziegler Road  
Fort Collins, Colorado 80525  
Attn: Kathy Manke, MS 76

PATENT APPLICATION

ATTORNEY DOCKET NO. 2009-048USORG

ASSIGNMENT OF PATENT APPLICATION TO AVAGO TECHNOLOGIES  
ECBU IP (SINGAPORE) PTE. LTD.

I/We the undersigned (each) have agreed and hereby agree to assign to Avago Technologies ECBU IP (Singapore) Pte. Ltd. (Company Registration No. 200512325K), a company incorporated under the laws of Singapore whose registered office is at No. 1 Yishun Avenue 7, Singapore 768923 (hereinafter AVAGO), in furtherance of my/our obligations to AVAGO, and do hereby assign and transfer to AVAGO, its successors and assigns, the entire right, title and interest, including the right of priority, in, to and under an application for Letters Patent of the United States entitled:

Method and Apparatus for Detecting Defective Traces in a Mutual Capacitance Touch Sensing Device

Filing date: Aug. 25, 2009 Serial No.: 12/547,354

and the invention(s) and improvement(s) set forth therein, and any and all continuations, continuations-in-part (C-I-P's), divisionals, and renewals of and substitutes for said application for Letters Patent, and any and all Letters Patent of the United States and of countries foreign thereto which may be granted thereon or therefor; and any reissues, or reexaminations, or extensions of said Letters Patents.

I/We additionally authorize AVAGO to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by AVAGO, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, and transfer not been made;

AND I/we hereby covenant that I/we have full right to convey the entire interest herein assigned, and that I/we have not executed and will not execute any agreement in conflict herewith, and I/we further covenant and agree that I/we will, each time a request is made, and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said invention(s) or improvement(s), said application and said Letters Patent, to AVAGO, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to AVAGO, or to its nominee, all known facts respecting said invention(s) or improvement(s), said application and said Letters Patents, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisionals, continuations, C-I-P's, reissue and foreign applications, to make all rightful oaths and declarations, and generally to do everything possible to aid AVAGO, its successors, assigns, nominees and legal representatives to obtain and enforce, for its or their own benefit, proper patent protection for said invention(s) or improvement(s) in any and all countries provided the expenses which may be incurred by me/us in lending such cooperation and assistance are paid by AVAGO;

AND I/we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to AVAGO, as assignee of the entire right, title and interest, any and all Letters Patent for said invention(s) or improvement(s), including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

I/we further authorize and direct AVAGO attorneys to insert the serial number and filing date of said application now identified by the attorney docket number and title set forth above as soon as the same shall have been made known to them by the United States Patent and Trademark Office.

IN WITNESS WHEREOF, I/we hereunto set my/our hand(s) and seal(s):

Thomas Murphy  
Inventor's Signature (Seal)

Date Assignment Signed: July 28, 2009

Inventor's Typed Name: Thomas Murphy

Date Application Signed: July 28, 2009

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) ss.:

Before me this \_\_\_\_\_ day of \_\_\_\_\_, personally appeared \_\_\_\_\_ who is personally known or proved to me on the basis of satisfactory evidence to be the person who acknowledged the foregoing instrument of assignment to be his/her free act and deed.

Notary Public  
My commission expires: \_\_\_\_\_

## ASSIGNMENT OF PATENT APPLICATION (cont.)

IN WITNESS WHEREOF, I/we hereunto set my/our hand(s) and seal(s):

Kevin C. Rathbun  
 Inventor's Signature (Seal)

Date Assignment Signed: 7-28-2009

Inventor's Typed Name: Kevin Rathbun

Date Application Signed: 7-28-2009

State of

County of

} ss.:

Before me this \_\_\_\_\_ day of \_\_\_\_\_, personally appeared \_\_\_\_\_ who is personally known or proved to me on the basis of satisfactory evidence to be the person who acknowledged the foregoing instrument of assignment to be his/her free act and deed.

Notary Public  
 My commission expires: \_\_\_\_\_

Keen Hun Leong  
 Inventor's Signature (Seal)

Date Assignment Signed: July 29, 2009

Inventor's Typed Name: Keen Hun Leong

Date Application Signed: July 29, 2009

State of

County of

} ss.:

Before me this \_\_\_\_\_ day of \_\_\_\_\_, personally appeared \_\_\_\_\_ who is personally known or proved to me on the basis of satisfactory evidence to be the person who acknowledged the foregoing instrument of assignment to be his/her free act and deed.

Notary Public  
 My commission expires: \_\_\_\_\_

\_\_\_\_\_  
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