

**PATENT ASSIGNMENT**

Electronic Version v1.1  
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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
James Costello	04/26/2011
Rani Saravanan	04/26/2011
Wee Sin Tan	04/26/2011
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Avago Technologies ECBU IP (Singapore) Pte. Ltd.
<b>Street Address:</b>	No. 1 Yishun Avenue 7
<b>City:</b>	Singapore
<b>State/Country:</b>	SINGAPORE
<b>Postal Code:</b>	768923
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	13098436
<b>CORRESPONDENCE DATA</b>	
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<b>Correspondent Name:</b>	Kathy Manke Avago Technologies Limited
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<b>ATTORNEY DOCKET NUMBER:</b>	2011-027USORG
<b>NAME OF SUBMITTER:</b>	Thomas F. Woods
<b>Total Attachments: 2</b> source=Assignment 2011-027USORG P AVG 365 Signed#page1.tif source=Assignment 2011-027USORG P AVG 365 Signed#page2.tif	

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

ATTORNEY DOCKET NO. 2011-027USORG

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:

**Infrared Attenuating or Blocking Layer in Optical Proximity Sensor**

Filing date: April 30, 2011 Serial No.: 13/098,436

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):

  
\_\_\_\_\_  
Inventor's Signature (Seal)

Date Assignment Signed: 26-4-2011

Inventor's Typed Name: **James Costello**

Date Application Signed: \_\_\_\_\_

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

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 real 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):

Inventor's Signature (Seal) \_\_\_\_\_ Date Assignment Signed: 26/04/11

Inventor's Typed Name: Rani Saravanan Date Application Signed: \_\_\_\_\_

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: \_\_\_\_\_

Inventor's Signature (Seal) \_\_\_\_\_ Date Assignment Signed: 26/4/11

Inventor's Typed Name: Wee Sin Tan Date Application Signed: \_\_\_\_\_

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: \_\_\_\_\_

Inventor's Signature (Seal) \_\_\_\_\_ Date Assignment Signed: \_\_\_\_\_

Inventor's Typed Name: \_\_\_\_\_ Date Application Signed: \_\_\_\_\_

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: \_\_\_\_\_