

## PATENT ASSIGNMENT COVER SHEET

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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>	
	LUCA BERT	01/08/2015	
	SUMANESH SAMANTA	01/12/2015	
	PHILLIP K. WONG	01/09/2015	
<b>RECEIVING PARTY DATA</b>			
<b>Name:</b>	AVAGO TECHNOLOGIES GENERAL 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>	
	Application Number:	14594326	
<b>CORRESPONDENCE DATA</b>			
<b>Fax Number:</b>			
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>			
<b>Email:</b>	mail@dbflaw.com		
<b>Correspondent Name:</b>	DUFT BORNSSEN & FETTIG, LLP		
<b>Address Line 1:</b>	1526 SPRUCE STREET, SUITE 302		
<b>Address Line 4:</b>	BOULDER, COLORADO 80302		
<b>ATTORNEY DOCKET NUMBER:</b>	L14-0363		
<b>NAME OF SUBMITTER:</b>	DREW SMITH		
<b>SIGNATURE:</b>	/Drew Smith/		
<b>DATE SIGNED:</b>	01/12/2015		
<b>Total Attachments: 4</b>			
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PATENT

APPLICATION

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

I/We the undersigned (each) have agreed and hereby agree to assign to Avago Technologies General IP (Singapore) Pte. Ltd. (Company Registration No. 200512430D), 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:

MULTI-NODE CACHE COHERENCY WITH INPUT OUTPUT VIRTUALIZATION

Filing date: 01/12/2015 Serial No.: 14594326

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.

**PATENT**  
**REEL: 034681 FRAME: 0335**

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

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

Inventor's Typed Name: Luca Bert

Date Assignment Signed: 1/8/15

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

Inventor's Typed Name: Sumanesh Samanta

Date Assignment Signed: \_\_\_\_\_

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

Inventor's Typed Name: Phillip K. Wong

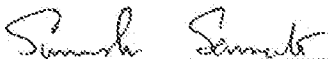
Date Assignment Signed: \_\_\_\_\_

Page 1 of 2

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

\_\_\_\_\_  
Inventor's Signature (Seal)  
Inventor's Typed Name: Luca Bert

Date Assignment Signed: \_\_\_\_\_

  
\_\_\_\_\_  
Inventor's Signature (Seal)  
Inventor's Typed Name: Sumanesh Samanta

Date Assignment Signed: 01/12/2015

\_\_\_\_\_  
Inventor's Signature (Seal)  
Inventor's Typed Name: Phillip K. Wong

Date Assignment Signed: \_\_\_\_\_

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

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

Inventor's Typed Name: Luca Bert

\_\_\_\_\_  
Date Assignment Signed:

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

Inventor's Typed Name: Sumanesh Samanta

\_\_\_\_\_  
Date Assignment Signed:

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

Inventor's Typed Name: Phillip K. Wong

\_\_\_\_\_  
Date Assignment Signed: 1/9/2015

Page 1 of 2