PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT5070256

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BROADCOM CORPORATION	01/20/2017

RECEIVING PARTY DATA

Name:	AVAGO TECHNOLOGIES GENERAL IP (SINGAPORE) PTE. LTD.
Street Address:	1 YISHUN AVENUE 7
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State/Country:	SINGAPORE
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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16041129

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DATE SIGNED:	07/27/2018

Total Attachments: 3
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PATENT ASSIGNMENT

THIS PATENT ASSIGNMENT ("Patent Assignment") is made and entered into effective as of November 28, 2016 (the "Effective Date"), by and between **Broadcom Corporation**, a company organized and existing under the laws of the State of California, with its principal place of business located at 5300 California Avenue, Irvine, California, 92617, U.S.A., ("Assignor") and **Avago Technologies General IP (Singapore) Pte. Ltd.**, a Singapore company with UEN 2005-12430-D, having a principal place of business at 1 Yishun Avenue 7, Singapore 768923 ("Assignee").

WHEREAS, Assignor and Assignee are parties to a certain Intellectual Property Purchase Agreement dated November 28, 2016 whereupon Assignor has agreed to assign the Patents (as defined below) to Assignee.

NOW, THEREFORE, in consideration of the sum of One U.S. Dollar (US$1.00) or equivalent and other good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, Assignor hereby assigns, transfers, sells and conveys to Assignee all of its rights, title and interest in and to any patent and/or patent application in which Assignor has any right, title or interest in any country, including each of the patents and patent applications that are specifically listed in Exhibit A attached hereto and made a part hereof, and any continuations, divisionals, continuations-in-part, provisionals and/or other applications that claim priority from any of such patents and patent applications and any patents issuing on any of the foregoing, and any reissues, reexaminations, substitutions, renewals, extensions and derivatives of any of the foregoing (collectively "the Patents"), and all rights, claims and privileges pertaining to the Patents, including, without limitation, rights to the underlying inventions, the right to prosecute and maintain the Patents, and the right to sue and recover damages for past, present and future infringement of any of the Patents and obtain injunctive relief.

IN WITNESS WHEREOF, Assignor and Assignee have caused this Patent Assignment to be signed and executed by the undersigned officers thereunto duly authorized as of the Effective Date.

BROADCOM CORPORATION

By: _____

Name: Jeyhan Karaoguz

Title: Vice President & General Manager, IPL

Date: 1-20-2017

AVAGO TECHNOLOGIES GENERAL IP (SINGAPORE) PTE. LTD.

By: _____

Name: Jeyhan Karaoguz

Title: Vice President & General Manager, IPL

Date: 1-20-2017

Patent No.	Grant Date	App No.	Filed Date	Country	App Title
8,548,087	2013-10-01	13/423,418	2012-03-19	United States of America	LONG TRAINING SEQUENCE FOR MIMO WLAN SYSTEMS
7,417,974	2008-08-26	10/973,687	2004-10-26	United States of America	TRANSMITTING HIGH RATE DATA WITHIN A MIMO WLAN (fka ISSUES ON RATES AND MODES FOR 802.11N)
		15/044,969	2016-02-16	United States of America	Pre-Distortion Calibration
		15/263,086	2016-09-12	United States of America	CONCURRENT POSITION FILTERS
8,089,890	2012-01-03	11/858,282	2007-09-20	United States of America	TRANSMITTING HIGH RATE DATA WITHIN A MIMO WLAN
9,130,705	2015-09-08	13/340,555	2011-12-29	United States of America	TRANSMITTING HIGH RATE DATA WITHIN A MIMO WLAN
		11/125,131	2005-05-10	United States of America	METHOD AND APPARATUS TO SIMULATE AUTOMATIC TEST EQUIPMENT
		14/969,202	2015-12-15	United States of America	COEXISTENCE MANAGEMENT VIA SCHEDULING
		14/969,209	2015-12-15	United States of America	ADJUSTING TRANSMISSION PARAMETERS TO SUPPORT COEXISTENCE FAIRNESS
7,378,878	2008-05-27	11/115,201	2005-04-27	United States of America	DRIVER CIRCUIT HAVING PROGRAMMABLE SLEW RATE
		15/011,186	2016-01-29	United States of America	Envelope Tracking Supply Modulators for Multiple Power Amplifiers
		15/284,359	2016-10-03	United States of America	METHODS, SYSTEMS, AND APPARATUS FOR THE IMPROVMENT OF SIGNAL INTEGRITY OVER AN UNBALANCED DIFFERENTIAL CHANNEL
7,453,761	2008-11-18	11/016,999	2004-12-20	United States of America	LOW COST LINE BUFFER SYSTEM DESIGN
		15/263,079	2016-09-12	United States of America	SUPPORT FOR LWA BASED ON IP-FLOW SPLITTING
		14/986,378	2015-12-31	United States of America	LOW-LATENCY PACKET FORWARDING
		15/285,028	2016-10-04	United States of America	Data Unit Retransmission
7,283,800	2007-10-16	10/902,765	2004-07-30	United States of America	ADAPTIVE MIXER OUTPUT FILTER BANDWIDTH CONTROL FOR VARIABLE CONVERSION GAIN DOWN-CONVERSION MIXER
		15/233,859	2016-08-10	United States of America	WIRELESS POWER TRANSFER GATE-DRIVE POWER REDUCTION
		15/196,919	2016-06-29	United States of America	Detection and Prevention of Intermodulation Products above Electromagnetic Compatibility (EMC) Levels for Power Line Communication (PLC) Devices
7,394,310	2008-07-01	10/975,105	2004-10-28	United States of America	PROGRAMMABLE SWITCHING CHARACTERISTICS OF ANALOG SWITCH IN TRANSCONDUCTANCE AMPLIFIER
		15/005,784	2016-01-25	United States of America	High Frequency Signal Termination Device
7,263,027	2007-08-28	11/034,101	2005-01-13	United States of America	INTEGRATED CIRCUIT CHIP HAVING NON-VOLATILE ON-CHIP MEMORIES FOR PROVIDING PROGRAMMABLE FUNCTIONS AND FEATURES (fka PROGRAMMING OF SILICON FUNCTIONS AND FEATURES THROUGH NON-VOLATILE ON-CHIP MEMORIES)
		15/063,387	2016-03-07	United States of America	SCALABLE LOW-LATENCY MESH INTERCONNECT FOR SWITCH CHIPS
		15/261,513	2016-09-09	United States of America	Beamforming feedback tone/sub-carrier location within wireless communications
		15/010,571	2016-01-29	United States of America	METHOD AND APPARATUS FOR FAST PHASE LOCKED LOOP (PLL) SETTLING WITH REDUCED FREQUENCY OVERSHOOT
		15/050,120	2016-02-22	United States of America	TRICK MODE OPERATION WITH MULTIPLE VIDEO STREAMS
7,499,353	2009-03-03	11/878,612	2007-07-25	United States of America	INTEGRATED CIRCUIT CHIP HAVING NON-VOLATILE ON-CHIP MEMORIES FOR PROVIDING PROGRAMMABLE FUNCTIONS AND FEATURES
		11/149,443	2005-06-09	United States of America	CREATING A DVD COMPLIANT STREAM DIRECTLY FROM ENCODER HARDWARE
		15/043,156	2016-02-12	United States of America	Small Area Native Level Shifter

Patent No.	Grant Date	App No.	Filed Date	Country	App Title
		62/215,225	2015-09-08	United States of America	Efficient signaling of OFDM/A structure within wireless communications
		62/342,672	2016-05-27	United States of America	Efficient signaling of OFDM/A structure within wireless communications
		60/561,738	2004-04-13	United States of America	NEW PACKET PREAMBLE FOR WIDEBAND WIRELESS LAN SYSTEMS
		62/252,182	2015-11-06	United States of America	Robust Electromagnetic Compatibility Performance for In-Vehicle Ethernet PHYs Utilizing Time Division Duplexing
		62/206,679	2015-08-18	United States of America	Packet-to-Packet Timing Reconstruction for Channel Bonding
		62/208,387	2015-08-21	United States of America	METHODS FOR DETERMINING RELATIVE LOCATIONS OF WIRELESS LOUDSPEAKERS
		62/356,832	2016-06-30	United States of America	Methods for Determining Relative Locations of Wireless Loudspeakers
		62/258,258	2015-11-20	United States of America	Calibration of WLAN Access Points for Location Services
		60/562,168	2004-04-14	United States of America	LONG TRAINING SYMBOL DEFINITION FOR MIMO WLAN SYSTEMS
		62/278,250	2016-01-13	United States of America	Transmission Line Coupler for Testing of Integrated Circuits
		62/260,598	2015-11-29	United States of America	Phantom Mode Datastream Transmission System
		62/217,389	2015-09-11	United States of America	Method for Fast Locking PLL with no frequency overshoot
		60/562,206	2004-04-14	United States of America	ISSUES ON RATES AND MODES FOR 802.11N
		62/289,649	2016-02-01	United States of America	Pre-Distortion Calibration
		62/217,657	2015-09-11	United States of America	CONCURRENT POSITION FILTERS
		60/651,664	2005-02-11	United States of America	SIMULATE AUTOMATIC TEST EQUIPMENT (fka VTEST (VIRTUAL ATE TEST PATTERN VALIDATION))
		62/267,018	2015-12-14	United States of America	Adaptive Symbol Mapping Modulation
		62/255,397	2015-11-14	United States of America	COEXISTENCE MANAGEMENT VIA SCHEDULING
		62/255,399	2015-11-14	United States of America	ADJUSTING TRANSMISSION PARAMETERS TO SUPPORT COEXISTENCE FAIRNESS
		62/219,620	2015-09-16	United States of America	TUNING RESONANT FREQUENCIES
		62/277,702	2016-01-12	United States of America	Envelope Tracking Supply Modulator for Multiple Power Amplifiers
		62/220,211	2015-09-17	United States of America	VARIABLE TUNING CAPACITANCE
		62/268,298	2015-12-16	United States of America	Compact Multi-Element Element Antenna Array
		62/238,392	2015-10-07	United States of America	CROSS-TALK REDUCTION THROUGH OFFSET TERMINATION
		62/238,572	2015-10-07	United States of America	IMPROVING SIGNAL INTEGRITY OVER AN UNBALANCED DIFFERENTIAL CHANNEL
		62/383,940	2016-09-06	United States of America	Improving signal integrity over an unbalanced differential channel
		60/577,814	2004-06-08	United States of America	LOW COST LINE BUFFER DESIGN
		62/236,594	2015-10-02	United States of America	SUPPORT FOR LWA BASED ON IP-FLOW SPLITTING
		62/296,497	2016-02-17	United States of America	LWA Based on IP Level Splitting
		62/387,261	2015-12-23	United States of America	LOW-LATENCY PACKET FORWARDING
		62/239,237	2015-10-08	United States of America	Gfast Retransmission Improvement
		62/385,934	2016-09-09	United States of America	Data Unit Retransmission
		62/236,821	2015-10-02	United States of America	WIRELESS POWER TRANSFER SYSTEM