504465784 07/20/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4512486

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JINJING JIANG	12/05/2016
LIWEN CHU	12/06/2016
LEI WANG	12/08/2016
YAKUN SUN	12/09/2016
HONGYUAN ZHANG	12/05/2016
HUI-LING LOU	12/05/2016

RECEIVING PARTY DATA

Name:	MARVELL SEMICONDUCTOR, INC.
Street Address:	5488 MARVELL LANE
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95054

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15374066

CORRESPONDENCE DATA

Fax Number: (408)222-2755

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.

408-222-2500 Phone:

kimberly@marvell.com Email:

KELVIN VIVIAN Correspondent Name:

Address Line 1: 5488 MARVELL LANEE

Address Line 4: SANTA CLARA, CALIFORNIA 95054

ATTORNEY DOCKET NUMBER:	MP6538
NAME OF SUBMITTER:	KELVIN VIVIAN
SIGNATURE:	/Kelvin Vivian/
DATE SIGNED:	07/20/2017

Total Attachments: 3

PATENT REEL: 043053 FRAME: 0743

504465784

source=MP6538_Assgn INV-MSI (EXECUTED)#page1.tif source=MP6538_Assgn INV-MSI (EXECUTED)#page2.tif source=MP6538_Assgn INV-MSI (EXECUTED)#page3.tif

> PATENT REEL: 043053 FRAME: 0744

Docket#: MP6538 PATENT

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of us, the undersigned,

Jinjing Jiang, Liwen Chu, Lei Wang, Yakun Sun, Hongyuan Zhang, and Hui-Ling Lou

who have created a certain invention for which an application for United States Letters Patent was executed by each of us concurrently herewith and entitled:

Access Point Association Using Trigger-Based Uplink Single User Transmission

Does hereby sell, assign and transfer to Marvell Semiconductor, Inc., a corporation of California, having a place of business at 5488 Marvell Lane, Santa Clara, CA 95054, its successors, assigns, and legal representatives, the full and exclusive right to said invention and said application and to any and all inventions described in said application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties;

Does hereby further sell, assign and transfer to Marvell Semiconductor, Inc., its successors, assigns, and legal representatives, the full and exclusive right to United States Provisional Patent Applications(s) No(s). 62/266,185, filed December 11, 2015, entitled, "Association Using Trigger Based UL-SU Transmission", and to any and all inventions described in said provisional patent application(s) for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be entitled to the benefit thereof in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties;

Agrees that Marvell Semiconductor, Inc., hereinafter referred to as Assignee, may apply for and receive Letters Patent for said invention and said inventions, hereinafter referred to as said invention, in its own name, in the United States, its territorial possessions, and all foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said Assignee, its successors, assigns and legal representatives, the undersigned will execute all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to said Assignee, its successors, assigns or legal representatives all facts known to the undersigned relating to said invention and the history thereof; and generally do everything possible which said Assignee, its successors, assigns, or legal representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said invention and for vesting title to said invention and all applications for patents on said invention in said Assignee, its successors, assigns, or legal representatives; and

Covenants with said Assignee, its successors, assigns, or legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

IN TESTIMONY WHEREOF we have hereunto set our signatures on the date(s) indicated below.

Full Name of First Inventor:			
Jinjing Jiang			
Inventor's Signatura:	ting	Date: Month/Day/Year 12/05/2016	

CO	
Full Name of Second Inventor:	
Liwen Chu	The state of the s
Inventor's Signature:	Date: Month/Day/Year
Inventor's Signature:	12/06/2016
Full Name of Third Inventor:	
Lei Wang	
Inventor's Signature:	Date: Month/Day/Year
	12/8/16
Full Name of Fourth Inventor:	3
Yakun Sun	
Inventor's Signature:	Date: Month/Day/Year
Full Name of Fifth Inventor:	
Hongyuan Zhang	
Inventor's Signature:	Date: Month/Day/Year
H-77 24	12/05/2016
Full Name of Sixth Inventor:	
Hui-Ling Lou	
Inventor's Signature:	Date: Month/Day/Year
a a	12/05/2016
Accepted on behalf of:	
MARVELL SEMICONDUCTOR, JHC.	
By: he he	
Name: Kelvin Vivian	
Title: Director, Intellectual Property	
-	
Date JULY 20 2017	
7	

Docket#: MP6538 PATENT

~ • • • • • • • • • • • • • • • • • • •	
Full Name of Second Inventor:	
. Liwen Chu	
Inventor's Signature:	Date: Month/Day/Year
Full Name of Third Inventor:	
Lei Wang	
Inventor's Signature:	Date: Month/Day/Year
Full Name of Fourth Inventor:	
Yakun Sun	
Inventor's Signature:	Date: Month/Day/Year
9~	12/9/2016
Full Name of Fifth Inventor:	
Hongyuan Zhang	
Inventor's Signature:	Date: Month/Day/Year
Full Name of Sixth Inventor:	
Hui-Ling Lou	
Inventor's Signature:	Date: Month/Day/Year
Accepted on behalf of:	
MARVELL SEMICONDUCTOR, INC.	
By: Tull	_
Name: Kelvin Vivian	_
Title: <u>Director, Intellectual Property</u>	-
Note TULY 20, 2017	

2/2

RECORDED: 07/20/2017