

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7404004

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
LIWEN CHU	08/22/2021
HONGYUAN ZHANG	07/30/2021
HUI-LING LOU	10/11/2021
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:	16877354
CORRESPONDENCE DATA	
Fax Number:	(408)222-2755
<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>	
Phone:	408-222-2500
Email:	sherir@marvell.com
Correspondent Name:	KELVIN VIVIAN
Address Line 1:	5488 MARVELL LANE
Address Line 4:	SANTA CLARA, CALIFORNIA 95054
ATTORNEY DOCKET NUMBER:	MP13021
NAME OF SUBMITTER:	KELVIN VIVIAN
SIGNATURE:	/Kelvin Vivian/
DATE SIGNED:	06/27/2022
Total Attachments: 6	
source=MP13021 Executed Assignment INVS-MSI (Accepted)#page1.tif	
source=MP13021 Executed Assignment INVS-MSI (Accepted)#page2.tif	
source=MP13021 Executed Assignment INVS-MSI (Accepted)#page3.tif	
source=MP13021 Executed Assignment INVS-MSI (Accepted)#page4.tif	

source=MP13021 Executed Assignment INVS-MSI (Accepted)#page5.tif

source=MP13021 Executed Assignment INVS-MSI (Accepted)#page6.tif

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency for which is hereby acknowledged, I or We, the undersigned,

Liwen Chu, Hongyuan Zhang, and Hui-Ling Lou

who have created certain invention for which one or more patent applications identified below (hereinafter "the Patent Application(s)") that have been, or are to be filed:

<u>Marvell Case No.</u>	<u>Application No.</u>	<u>Filing Date</u>	<u>Title</u>
MP13021PR	62/849,043	05/16/2019	Basic Service Set (BSS) Operation with Band Aggregation – Capabilities and Basic Service Set (BSS) Operation
MP13021PR2	62/877,207	07/22/2019	Basic Service Set (BSS) Operation with Band Aggregation – Capabilities and Basic Service Set (BSS) Operation
MP13021	16/877,354	05/18/2020	WIFI Network Operation with Channel Aggregation

Do hereby confirm any prior assignment, and to the extent that I have not already done so, agree to sell, assign, and transfer, and do 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, and its successors or assigns (hereinafter "Assignee"), the entire rights, title, and interest, including all priority rights, in or to any and all inventions described in the Patent Application(s), the Patent Application(s), and all continuations in whole or in part, divisions, and other applications claiming priority directly or indirectly from the Patent Application(s) which have been or are to be filed in the United States and/or any foreign countries including national stage applications, and any patents, including utility models and other similar registrations, in the United States and/or any foreign countries which may be granted thereon, including but not limited to reissues, renewals, and reexaminations thereof;

Authorize and request that the attorneys of record in any of the Patent Application(s) insert in this assignment the filing date(s) and application number(s) of the Patent Application(s) when officially known (the Assignee authorizes and requests the same);

Agree that Assignee may apply for and receive patents including utility models and other similar registrations for the foregoing rights, title and interest in its own name, in the United States and/or any foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of the Assignee, and its successors or assigns, the undersigned will execute all rightful oaths, declarations, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to the Assignee, and its successors or assigns all facts known to the undersigned relating to the foregoing rights, title and interest; and generally do everything possible and reasonable which the Assignee, and its successors, or assigns consider necessary, desirable or expedient for aiding in securing, maintaining and enforcing proper protection for applicable patent rights and for vesting applicable title in the Assignee and its successors or assigns; and

Covenant with the Assignee, and its successors or assigns that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, there are no outstanding encumbrances, liens or other obligations or restrictions on the rights, titles and interests herein assigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

IN TESTIMONY WHEREOF I have hereunto set my signature or our signatures on the date indicated below.

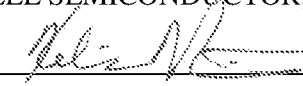
Full Name of First Inventor: Liwen Chu	
Inventor's Signature: /Liwen Chu/	Date: Month/Day/Year 08/22/2021

Full Name of Second Inventor: Hongyuan Zhang	
Inventor's Signature:	Date: Month/Day/Year

Full Name of Third Inventor: Hui-Ling Lou	
Inventor's Signature:	Date: Month/Day/Year

Accepted by:

MARVELL SEMICONDUCTOR, INC.

By: 

Name: Kelvin M. Vivian

Title: Director, Assistant General Counsel, IP Development

Date: 17 May 2022

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency for which is hereby acknowledged, I or We, the undersigned,

Liwen Chu, Hongyuan Zhang, and Hui-Ling Lou

who have created certain invention for which one or more patent applications identified below (hereinafter “the Patent Application(s)”) that have been, or are to be filed:

<u>Marvell Case No.</u>	<u>Application No.</u>	<u>Filing Date</u>	<u>Title</u>
MP13021PR	62/849,043	05/16/2019	Basic Service Set (BSS) Operation with Band Aggregation – Capabilities and Basic Service Set (BSS) Operation
MP13021PR2	62/877,207	07/22/2019	Basic Service Set (BSS) Operation with Band Aggregation – Capabilities and Basic Service Set (BSS) Operation
MP13021	16/877,354	05/18/2020	WIFI Network Operation with Channel Aggregation

Do hereby confirm any prior assignment, and to the extent that I have not already done so, agree to sell, assign, and transfer, and do 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, and its successors or assigns (hereinafter “Assignee”), the entire rights, title, and interest, including all priority rights, in or to any and all inventions described in the Patent Application(s), the Patent Application(s), and all continuations in whole or in part, divisions, and other applications claiming priority directly or indirectly from the Patent Application(s) which have been or are to be filed in the United States and/or any foreign countries including national stage applications, and any patents, including utility models and other similar registrations, in the United States and/or any foreign countries which may be granted thereon, including but not limited to reissues, renewals, and reexaminations thereof;

Authorize and request that the attorneys of record in any of the Patent Application(s) insert in this assignment the filing date(s) and application number(s) of the Patent Application(s) when officially known (the Assignee authorizes and requests the same);

Agree that Assignee may apply for and receive patents including utility models and other similar registrations for the foregoing rights, title and interest in its own name, in the United States and/or any foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of the Assignee, and its successors or assigns, the undersigned will execute all rightful oaths, declarations, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to the Assignee, and its successors or assigns all facts known to the undersigned relating to the foregoing rights, title and interest; and generally do everything possible and reasonable which the Assignee, and its successors, or assigns consider necessary, desirable or expedient for aiding in securing, maintaining and enforcing proper protection for applicable patent rights and for vesting applicable title in the Assignee and its successors or assigns; and

Covenant with the Assignee, and its successors or assigns that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, there are no outstanding encumbrances, liens or other obligations or restrictions on the rights, titles and interests herein assigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

IN TESTIMONY WHEREOF I have hereunto set my signature or our signatures on the date indicated below.

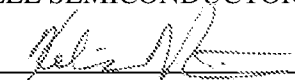
Full Name of First Inventor: Liwen Chu	
Inventor's Signature:	Date: Month/Day/Year

Full Name of Second Inventor: Hongyuan Zhang	
Inventor's Signature: /Hongyuan Zhang/	Date: Month/Day/Year 7/30/2021

Full Name of Third Inventor: Hui-Ling Lou	
Inventor's Signature:	Date: Month/Day/Year

Accepted by:

MARVELL SEMICONDUCTOR, INC.

By: 

Name: Kelvin M. Vivian

Title: Director, Assistant General Counsel, IP Development

Date: 17 May 2022

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency for which is hereby acknowledged, I or We, the undersigned,

Liwen Chu, Hongyuan Zhang, and Hui-Ling Lou

who have created certain invention for which one or more patent applications identified below (hereinafter "the Patent Application(s)") that have been, or are to be filed:

<u>Marvell Case No.</u>	<u>Application No.</u>	<u>Filing Date</u>	<u>Title</u>
MP13021PR	62/849,043	05/16/2019	Basic Service Set (BSS) Operation with Band Aggregation – Capabilities and Basic Service Set (BSS) Operation
MP13021PR2	62/877,207	07/22/2019	Basic Service Set (BSS) Operation with Band Aggregation – Capabilities and Basic Service Set (BSS) Operation
MP13021	16/877,354	05/18/2020	WIFI Network Operation with Channel Aggregation

Do hereby confirm any prior assignment, and to the extent that I have not already done so, agree to sell, assign, and transfer, and do 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, and its successors or assigns (hereinafter "Assignee"), the entire rights, title, and interest, including all priority rights, in or to any and all inventions described in the Patent Application(s), the Patent Application(s), and all continuations in whole or in part, divisions, and other applications claiming priority directly or indirectly from the Patent Application(s) which have been or are to be filed in the United States and/or any foreign countries including national stage applications, and any patents, including utility models and other similar registrations, in the United States and/or any foreign countries which may be granted thereon, including but not limited to reissues, renewals, and reexaminations thereof;

Authorize and request that the attorneys of record in any of the Patent Application(s) insert in this assignment the filing date(s) and application number(s) of the Patent Application(s) when officially known (the Assignee authorizes and requests the same);

Agree that Assignee may apply for and receive patents including utility models and other similar registrations for the foregoing rights, title and interest in its own name, in the United States and/or any foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of the Assignee, and its successors or assigns, the undersigned will execute all rightful oaths, declarations, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to the Assignee, and its successors or assigns all facts known to the undersigned relating to the foregoing rights, title and interest; and generally do everything possible and reasonable which the Assignee, and its successors, or assigns consider necessary, desirable or expedient for aiding in securing, maintaining and enforcing proper protection for applicable patent rights and for vesting applicable title in the Assignee and its successors or assigns; and

Covenant with the Assignee, and its successors or assigns that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, there are no outstanding encumbrances, liens or other obligations or restrictions on the rights, titles and interests herein assigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

IN TESTIMONY WHEREOF I have hereunto set my signature or our signatures on the date indicated below.

Full Name of First Inventor: Liwen Chu	
Inventor's Signature:	Date: Month/Day/Year

Full Name of Second Inventor: Hongyuan Zhang	
Inventor's Signature:	Date: Month/Day/Year

Full Name of Third Inventor: Hui-Ling Lou	
Inventor's Signature: <i>H Lou</i>	Date: Month/Day/Year <i>10/11/21</i>

Accepted by:

MARVELL SEMICONDUCTOR, INC.

By: *Kelvin M. Vivian*

Name: Kelvin M. Vivian

Title: Director, Assistant General Counsel, IP Development

Date: 17 May 2022