PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7323871

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
MOSAID TECHNOLOGIES INCORPORATED	01/05/2022

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.		
Street Address:	NO.8, LI-HSIN RD. 6, HSINCHU SCIENCE PARK,		
City:	HSINCHU		
State/Country:	TAIWAN		
Postal Code:	30078		

PROPERTY NUMBERS Total: 19

Property Type	Number
Patent Number:	7007071
Patent Number:	8718056
Patent Number:	7830877
Patent Number:	8855121
Patent Number:	11006276
Patent Number:	8806305
Patent Number:	8923180
Patent Number:	10080188
Patent Number:	10368307
Patent Number:	10849063
Patent Number:	10004060
Patent Number:	10631277
Patent Number:	11082956
Patent Number:	10091044
Patent Number:	10498578
Patent Number:	10944612
Patent Number:	9986585
Patent Number:	10582534
Patent Number:	11102809

PATENT REEL: 059952 FRAME: 0976

507276950

CORRESPONDENCE DATA

Fax Number:

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.

Email: USA@JCIPGroup.com

Correspondent Name: JCIPRNET

Address Line 1: 8F-1, NO. 100, ROOSEVELT RD. SEC. 2,

Address Line 4: TAIPEI, TAIWAN 100404

ATTORNEY DOCKET NUMBER: TW0027-MOSAID-NETWORKING

NAME OF SUBMITTER: BELINDA LEE

SIGNATURE: /Belinda Lee/

DATE SIGNED: 05/11/2022

Total Attachments: 3

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> PATENT REEL: 059952 FRAME: 0977

ASSIGNMENT AGREEMENT (Networking)

For good and valuable consideration, the receipt of which is hereby acknowledged, MOSAID Technologies Inc., having a place of business at 515 Legget Drive, Suite 100, Ottawa, Ontario K2K 3G4, Canada ("Assignor"), does hereby sell, assign, transfer, and convey unto Taiwan Semiconductor Manufacturing Company Ltd, having a place of business at No. 8, Li-Hsin Road VI, Hsinchu Science Park, Hsinchu, Taiwan 300-78, R.O.C. ("Assignee"), or its designees, all right, title, and interest that exist today and may exist in the future in and to any and all of the following:

Patent No.	Country	Filing Date	Title and First Named Inventor
7,007,071	US	7/24/2000	METHOD AND APPARATUS FOR REDUCING POOL STARVATION IN A SHARED MEMORY SWITCH
			David A. Brown
8,718,056	US	4/2/2012	TRUNKING IN A MATRIX
			Richard M. Wyatt
7,830,877	US	8/15/2007	CONGESTION LEVEL MANAGEMENT IN A NETWORK
			DEVICE
			David A. Brown
8,855,121	US	3/12/2013	CONGESTION MANAGEMENT IN A NETWORK
			David A. Brown
8,620,270	US	6/15/2010	SYSTEM AND METHOD PROVIDING INTEROPERABILITY
			BETWEEN CELLULAR AND OTHER WIRELESS SYSTEMS
	7.50		Nima Ahmadvand
11,006,276	US	12/5/2013	SYSTEM AND METHOD PROVIDING INTEROPERABILITY
			BETWEEN CELLULAR AND OTHER WIRELESS SYSTEMS
			Nima Ahmadvand
5726312	JP	9/27/2011	ERROR DETECTION AND CORRECTION CODES FOR
			CHANNELS AND MEMORIES WITH INCOMPLETE ERROR CHARACTERISTICS
			Steven Przybylski
8,806,305	US	4/18/2013	ERROR DETECTION AND CORRECTION CODES FOR
0,000,000	U3	+\10\7012	CHANNELS AND MEMORIES WITH INCOMPLETE ERROR
			CHARACTERISTICS
			Steven Przybylski
8,923,180	US	1/23/2013	POWER SAVING IN WIRELESS NETWORK ENTITIES
2,222,232	~~	,,	Nima Ahmadyand
9,237,518	US	11/24/2014	POWER SAVING IN WIRELESS NETWORK ENTITIES
in succession in the contract of	77		Nima Ahmadvand
10,080,188	10,080,188 US	2/20/2015	SYSTEM AND METHOD FOR CONTROLLING A WIRELESS
			NETWORK
			Xuejun Lu
10,368,307	US	8/21/2018	SYSTEM AND METHOD FOR CONTROLLING A WIRELESS
A Mariana Marini		i i di maniferi i i i i i i i i i i i i i i i i i i	NETWORK
			Xuejum Lu
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10,849,063	US	6/3/2019	SYSTEM AND METHOD FOR CONTROLLING A WIRELESS NETWORK
10,004,060	US	3/24/2015	SCHEDULING SYSTEMS AND METHODS FOR WIRELESS NETWORKS Khiem Le
10,631,277	US	6/1/2018	SCHEDULING SYSTEMS AND METHODS FOR WIRELESS NETWORKS Khiem Le
11,082,956	U5	3/18/2020	SCHEDULING SYSTEMS AND METHODS FOR WIRELESS NETWORKS Khiem Le
10,091,044	US	7/16/2015	SYSTEM AND METHOD FOR FREQUENCY SYNCHRONIZATION OF DOPPLER-SHIFTED SUBCARRIERS Hanwu Hu
10,498,578	US	8/30/2018	SYSTEM AND METHOD FOR FREQUENCY SYNCHRONIZATION OF DOPPLER-SHIFTED SUBCARRIERS Hanwu Hu
10,944,612	US	10/30/2019	SYSTEM AND METHOD FOR FREQUENCY SYNCHRONIZATION OF DOPPLER-SHIFTED SUBCARRIERS Hanwu Hu
9,986, 58 5	US	7/30/2015	RELAY SYSTEMS AND METHODS FOR WIRELESS NETWORKS Xuejun Lu
10,582,534	US	4/9/2018	RELAY SYSTEMS AND METHODS FOR WIRELESS NETWORKS Xuejun Lu
11,102,809	US	1/24/2020	RELAY SYSTEMS AND METHODS FOR WIRELESS NETWORKS Xuejun Lu
Serial No.	Country	Filing Date	Title and First Named Inventor
10821513.8	EP	10/5/2010	SYSTEM AND METHOD PROVIDING INTEROPERABILITY BETWEEN CELLULAR AND OTHER WIRELESS SYSTEMS Nima Ahmadvand
2019800842602	CN	12/18/2019	SYSTEM AND METHOD FOR A NETWORK ACCESS SERVICE Xuejun Lu
19897889.2	EÞ	12/18/2019	SYSTEM AND METHOD FOR A NETWORK ACCESS SERVICE Xuejun Lu
2021-535043	JР	12/18/2019	SYSTEM AND METHOD FOR A NETWORK ACCESS SERVICE Xuejun Lu
10-2021- 7021756	KR	12/18/2019	SYSTEM AND METHOD FOR A NETWORK ACCESS SERVICE Xuejun Lu
17/311,908	US	12/18/2019	SYSTEM AND METHOD FOR A NETWORK ACCESS SERVICE Xuejun Lu

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As well as the right to claim priority based on the applications, the same to be held and enjoyed by Assignee to the full end of the term for which said Letters Patents are granted, as fully and entirely as the same could have been held and enjoyed by Assignor if this assignment and sale had not been made, together with all rights of actions for past infringement thereof including the right to recover damages for said infringement subject to pre-existing rights of others.

IN TEST MONY WHEREOF, Assignor has caused this assignment to be signed by its duly authorized officer this 5th day of January 2022.

ASSIGNOR:

MOSAID Technologies, Inc.

Name: Boris Teksler

Title: President & CEO

(Signature MUST be attested)

County of SANTA CLAVA

NANCY NIP otary Public - California Santa Clara County Commission # 2371483 Comm. Expires Aug 19, 2025

city of PAID Alto, "

On this 5th day of January 2022, before me appeared to me personally known who, being duly sworn, did depose and say that s/he is the of Assignor as named in the Assignment above and that such Assignment was signed on behalf of Assignor, and such person acknowledged the Assignment to be the free and authorized act and deed of Assignor.

Notary Public

My commission expires: August 94, 2025