PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6558462

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
CAVIUM, LLC	02/05/2021

RECEIVING PARTY DATA

Name:	MARVELL INTERNATIONAL LTD.		
Street Address:	VICTORIA PLACE, 5TH FLOOR		
Internal Address:	31 VICTORIA STREET		
City:	HAMILTON		
State/Country:	BERMUDA		
Postal Code:	HM10		

PROPERTY NUMBERS Total: 20

Property Type	Number
Application Number:	16186313
Application Number:	16226508
Application Number:	16226534
Application Number:	16226539
Application Number:	16226550
Application Number:	16226559
Application Number:	16226564
Application Number:	62628130
Application Number:	16224638
Application Number:	16173877
Application Number:	16148796
Application Number:	62663887
Application Number:	16384878
Application Number:	62663734
Application Number:	16400992
Application Number:	62665142
Application Number:	16236455
Application Number:	62665271
Application Number:	16404029

PATENT REEL: 055321 FRAME: 0517

506511687

Property Type	Number				
Application Number:	62667215				

CORRESPONDENCE DATA

Fax Number: (248)641-0270

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.

Phone: 2486411600

Email: hprovost@hdp.com

Correspondent Name: HARNESS, DICKEY & PIERCE, P.L.C.

Address Line 1: P.O. BOX 828

Address Line 4: BLOOMFIELD HILLS, MICHIGAN 48303

ATTORNEY DOCKET NUMBER:	5059-500027
NAME OF SUBMITTER:	HOLLY PROVOST
SIGNATURE:	/Holly Provost/
DATE SIGNED:	02/18/2021

Total Attachments: 4

source=CAV1B (US) Assignment (Cavium LLC to MIL) (FULLY EXECUTED)#page1.tif source=CAV1B (US) Assignment (Cavium LLC to MIL) (FULLY EXECUTED)#page2.tif source=CAV1B (US) Assignment (Cavium LLC to MIL) (FULLY EXECUTED)#page3.tif source=CAV1B (US) Assignment (Cavium LLC to MIL) (FULLY EXECUTED)#page4.tif

Patent-CAV1B Cavium, LLC to MIL

ASSIGNMENT

WHEREAS, Cavium, LLC, a corporation organized under the laws of Delaware, and with offices at 5488 Marvell Lane, Santa Clara, California 95054 (hereinafter "Assignor") owns the patents and patent applications listed in Exhibit A attached hereto and incorporated herein by this reference (hereinafter "Group A");

WHEREAS, Marvell International Ltd., a corporation organized under the laws of Bermuda, and with offices at Victoria Place, 5th Floor, 31 Victoria Street, Hamilton, HM10, Bermuda, (hereinafter "Assignee"), desires to acquire the Assignor's ownership interest in, to and under the Group A; and

NOW, THEREFORE, for consideration of one dollar (\$1.00) and other good and valuable consideration paid by Assignee to Assignor, the receipt and sufficiency of which hereby is acknowledged, Assignor does hereby sell, assign and transfer to Assignee its entire interest in and to the **Group A**, including all divisions, continuations, reexaminations, reissues, and foreign counterparts of the applications and patent registrations for the **Group A** (and the right to claim priority and the right to apply for any of the foregoing); including assignment of any and all provisional applications that are relied upon for priority; all rights to causes of action and remedies related thereto (including, without limitation, the right to sue for past, present or future infringement, misappropriation or violation of rights related to the foregoing); and any and all other rights and interests arising out of, in connection with or in relation to the **Group A**.

FURTHER, Assignor hereby covenants and agrees to execute and deliver, at the request of Assignee, such further instruments of transfer and assignment and to take any other action as such Assignee may reasonably request to more effectively consummate the assignments contemplated by this Assignment. Specifically, Assignor agrees to, at Assignee's expense, execute, acknowledge and deliver such further documents, instruments, conveyances and assurances and take such further actions as may be reasonably required to register in the name of Assignee the assignment of any of the Patents in Group A in any appropriate governmental agency or registrar.

IN WITNESS WHEREOF, Assignor and Assignee have executed this Patent Assignment on the date set forth below.

<u> ASS</u>	<u>IGNOR</u> :	
	ium, LLC, rporation organized under the laws of Dela	ware
Ву:	Mattell 1 Juy Mitchell Gaynor	Date: February, 2021
	Executive Vice President, Chief Administ	tration and Legal Officer, Secretary
	epted by:	
	vell International Ltd., poration organized under the laws of Berm	uda
Ву:	25. J.	Date: February 1, 2021
	Sherman Taylor	

General Manager

Exhibit A

MP#	<u>Cty</u>	AppNo	AppDt	PatNo	IssDt	Title
						SYSTEMS AND METHODS FOR PROGRAMMABLE HARDWARE
						ARCHITECTURE FOR MACHINE
MP12803	US	16/186,313	11/9/2018			LEARNING
						SINGLE INSTRUCTION SET
						ARCHITECTURE (ISA) FORMAT FOR
MP12803-2	us	16/226,508	12/19/2018			MULTIPLE ISAS IN MACHINE LEARNING INFERENCE ENGINE
TV (C da do de de de de de	+	120, 220,000	12,20,2020			STREAMING ENGINE FOR
				•		MACHINE LEARNING
MP12803-3	us	16/226,534	12/19/2018			ARCHITECTURE
***************************************	***************************************	***************************************	<u> </u>			ARRAY-BASED INFERENCE ENGINE
MP12803-4	US	16/226,539	12/19/2018	10,824,433	11-3-20	FOR MACHINE LEARNING
						ARCHITECTURE FOR DENSE
						OPERATIONS IN MACHINE
MP12803-5	US	16/226,550	12/19/2018		}	LEARNING INFERENCE ENGINE
						ARCHITECTURE FOR IRREGULAR
		_				OPERATIONS IN MACHINE
MP12803-6	US	16/226,559	12/19/2018			LEARNING INFFERENCE ENGINE
***********		acher eca	an lantanaa			ARCHITECTURE OF CROSSBAR OF
MP12803-7	<u>US</u>	16/226,564	12/19/2018			INFERENCE ENGINE
MP12803PR	US	62/628,130	2/8/2018			MACHINE LEARNING SYSTEM
						SYSTEM AND METHOD FOR
* 454 2020		4.0.(00.4.000	40/40/0040			COMPENSATING FOR A DROOP
MP12828	<u> </u>	16/224,638	12/18/2018			EVENT
						METHODS AND APPARATUS FOR JOB SCHEDULING IN A
				8		PROGRAMMABLE MIXED-RADIX
MP12829I1	US	16/173,877	10/29/2018	10,878,060	12-29-20	DFT/IDFT PROCESSOR
	, , , , , , , , , , , , , , , , , , ,			20,00,0	122730	METHODS AND APPARATUS FOR
						DYNAMIC ACKNOWLEDGEMENT
						LIST SELECTION IN DETECTION OF
			:			UPLINK CONTROL CHANNEL
MP12831	us	16/148,796	10/1/2018	10,892,876	1-12-21	FORMATS
		·				Method and Apparatus for
		***************************************				Dynamic ACK List Selection in
	1					Detection of Uplink Control
MP12831PR	US	62/663,887	4/27/2018			Channel Format 2A and 28 in LTE
MP12832	US	16/204 979	AMEMOAA	10,772,153	9-8-20	METHODS AND APPARATUS FOR TWO-STAGE ACK/DTX DETECTION
MILTEOSE	U3	16/384,878	4/15/2019	10,//2,103	3-0-2V	Method and Apparatus for Two-
						Stage ACK DTX Detection for
						Carrier Aggression with Symbol
		Para de la companya del companya de la companya del companya de la				Domain Metric and Majority Logic
MP12832PR	US	62/663,734	4/27/2018			Decision

<u>MP#</u>	Cty	<u>AppNo</u>	<u>AppDt</u>	<u>PatNo</u>	IssDt	<u>Title</u>
MP12834	US	16/400,992	5/1/2019	_		Methods and Apparatus for Symbol-to-Symbol Multiplexing of Control, Data, and Reference Signals on A 5G Uplink
MP12834PR	US	62/665,142	5/1/2018			Method and Apparatus for Symbol-By-Symbol UCI And Data Multiplexing with Bit-Masking Assisted DMRS and PTRS Mapping in 5G New Radio Uplink
MP12835	US	16/236,455	12/29/2018	10,651,951	5-12-20	METHODS AND APPARATUS FOR SUB-BLOCK BASED ARCHITECTURE OF CHOLESKY DECOMPOSITION AND CHANNEL WHITENING
MP12835PR	US	62/665,271	5/1/2018			Method and Apparatus for Sub- Block Based Architecture of Cholesky Decomposition and Channel Whitening
MP12836	us	16/404,029	5/6/2019			Methods and Apparatus for Providing A Demapping System to Demap Uplink Transmissions
MP12836PR	US	62/667,215	5/4/2018			METHOD AND APPARATUS FOR PROVIDING A SAMPLE SINGLE- SHOT PROCESSING SCHEME FOR DATA TRANSMISSION

PATENT REEL: 055321 FRAME: 0522

RECORDED: 02/18/2021