

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7162990

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	RELEASE OF SECURITY INTEREST	
CONVEYING PARTY DATA		
Name		Execution Date
BANK OF AMERICA, N.A., AS AGENT		02/07/2022
RECEIVING PARTY DATA		
Name:	SMART MODULAR TECHNOLOGIES, INC.	
Street Address:	39870 EUREKA DRIVE	
City:	NEWARK	
State/Country:	CALIFORNIA	
Postal Code:	94560	
PROPERTY NUMBERS Total: 39		
Property Type	Number	
Patent Number:	10826989	
Patent Number:	9603252	
Patent Number:	10529688	
Patent Number:	8423724	
Patent Number:	8767463	
Patent Number:	7937641	
Patent Number:	7724604	
Patent Number:	8644105	
Patent Number:	8068378	
Patent Number:	8250295	
Patent Number:	10755757	
Patent Number:	8990489	
Patent Number:	8626998	
Patent Number:	9779016	
Patent Number:	8379391	
Patent Number:	7623355	
Patent Number:	9684520	
Patent Number:	9204550	
Patent Number:	9939855	
Patent Number:	9576615	

PATENT

Property Type	Number
Patent Number:	6707756
Patent Number:	9424188
Patent Number:	9754634
Patent Number:	7956450
Patent Number:	9648754
Patent Number:	10534619
Patent Number:	9946469
Patent Number:	10838806
Patent Number:	10409754
Patent Number:	10573354
Patent Number:	10338821
Patent Number:	10474362
Patent Number:	10185609
Patent Number:	10510432
Patent Number:	10551892
Patent Number:	10488892
Application Number:	14994065
Application Number:	16889727
Application Number:	16889729

CORRESPONDENCE DATA

Fax Number: (704)444-8847

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: 213-457-6624

Email: ksaltrick@mcguirewoods.com

Correspondent Name: MCGUIREWOODS LLP

Address Line 1: 355 S. GRAND AVENUE SUITE 4200

Address Line 2: ATTENTION: Y.LEE, ESQ.

Address Line 4: LOS ANGELES, CALIFORNIA 90071

NAME OF SUBMITTER:	YOOJIN LEE
SIGNATURE:	/S/ YOOJIN LEE
DATE SIGNED:	02/07/2022

Total Attachments: 6

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**TERMINATION AND RELEASE OF GRANT
OF SECURITY INTEREST IN UNITED STATES PATENTS**

This **TERMINATION AND RELEASE OF GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS** (this “Release Agreement”), dated as of February 7, 2022 is made by **BANK OF AMERICA, N.A.**, a national banking association, as Agent (the “Grantee”) in favor of **SMART MODULAR TECHNOLOGIES, INC.**, a California corporation (“Technologies”), **SMART HIGH RELIABILITY SOLUTIONS LLC**, a Delaware limited liability company (“Smart High Reliability”), **SMART EMBEDDED COMPUTING INC.**, a Wisconsin corporation (“Computing”), **PENGUIN COMPUTING INC.**, a California corporation (“Penguin”; and together with Technologies, Smart High Reliability and Computing, each, a “Grantor” and collectively, the “Grantors”).

WHEREAS, the Grantors and the Grantee are parties to that certain Loan, Guaranty and Security Agreement dated as of December 23, 2020 in which the Grantors delivered to the Grantee that certain Memorandum and Notice of Security Interest in Intellectual Property (the “Memorandum”) whereby certain Grantors granted the Grantee a security interest in certain IP Collateral (as that term is defined in the Memorandum) of such Grantors, including the patents and patent registrations listed on **Schedule A** attached hereto (the “Secured Patents”) for recordation with the United States Patent and Trademark Office (the “USPTO”); and

WHEREAS, the Memorandum was recorded with respect to the Secured Patents with the Patent Division of USPTO on December 23, 2020 at Reel 54738/Frame 0855; and

WHEREAS, the Obligations secured by said security interest have been paid in full or otherwise satisfied; and

WHEREAS, the Grantee therefore desires to terminate and release its security interest and all of its right, title and interest in each of the IP Collateral, including the Secured Patents, as herein provided.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Grantee hereby agrees as follows:

1. **Release and Assignment**. The Grantee hereby discharges, terminates and releases the entirety of its security interest in all of the IP Collateral, including the Secured Patents, and the Grantee hereby assigns and transfers to the Grantors, without recourse, all of the Grantee’s right, title and interest in and to all of the IP Collateral and each of the Secured Patents, if any, effective as of the date set forth above.

2. **Further Assurances**. The Grantee hereby agrees to execute, acknowledge and deliver all such further instruments and to take all such further actions as may be reasonably requested or are required in order to more fully and effectively carry out the purposes of this Release Agreement at the Grantors’ sole cost and expense.

The Grantee hereby agrees that this Release Agreement and all claims shall be governed by the laws of the State of New York, without giving effect to any conflict of law principles except federal laws relating to national banks and Sections 14.13 and 14.15 of the Loan Agreement are hereby incorporated by reference.

[Signature Page Follows]

IN WITNESS WHEREOF, the Grantee has executed this Termination and Release of Grant of Security Interest in United States Patents as of the date written above.

BANK OF AMERICA, N.A.

By: 

Name: Carlos Gil

Title: Senior Vice President

TERMINATION AND RELEASE OF GRANT OF SECURITY INTEREST IN PATENTS
(Smart Modular)
SIGNATURE PAGE

PATENT
REEL: 058913 FRAME: 0388

**SCHEDULE A
TO RELEASE AGREEMENT**

SECURED PATENTS

Owner	Title	Application #	Number
SMART Modular Technologies, Inc.	DATA STORAGE SYSTEM WITH INFORMATION EXCHANGE MECHANISM AND METHOD OF OPERATION THEREOF	14/512,624	10,826,989
SMART Modular Technologies, Inc.	INTEGRATED CIRCUIT DEVICE SYSTEM WITH ELEVATED CONFIGURATION AND METHOD OF MANUFACTURE THEREOF	14/077,908	9,603,252
SMART Modular Technologies, Inc.	INTEGRATED CIRCUIT DEVICE SYSTEM WITH ELEVATED CONFIGURATION AND METHOD OF MANUFACTURE THEREOF	15/462,885	10529688
SMART Modular Technologies, Inc.	DYNAMIC BACK-UP STORAGE SYSTEM WITH RAPID RESTORE AND METHOD OF OPERATION THEREOF	12/878,008	8,423,724
SMART Modular Technologies, Inc.	NON-VOLATILE DYNAMIC RANDOM ACCESS MEMORY SYSTEM WITH NON-DELAY-LOCK-LOOP MECHANISM AND METHOD OF OPERATION THEREOF	13/207,503	8,767,463
SMART Modular Technologies, Inc.	MEMORY MODULES WITH ERROR DETECTION AND CORRECTION	11/643,100	7,937,641
SMART Modular Technologies, Inc.	CLOCK AND POWER FAULT DETECTION FOR MEMORY MODULES	11/552,949	7,724,604
SMART Modular Technologies, Inc.	CLOCK AND POWER FAULT DETECTION FOR MEMORY MODULES	12/770,576	8,644,105
SMART Modular Technologies, Inc.	CLOCK AND POWER FAULT DETECTION FOR MEMORY MODULES	12/770,610	8,068,378
SMART Modular Technologies, Inc.	MULTI-RANK MEMORY MODULE THAT EMULATES A MEMORY MODULE HAVING A DIFFERENT NUMBER OF RANKS	10/752,151	8,250,295
SMART Modular Technologies, Inc.	MULTI-RANK MEMORY MODULE THAT EMULATES A MEMORY MODULE HAVING A DIFFERENT NUMBER OF RANKS	12/902,073	10,755,757

Owner	Title	Application #	Number
SMART Modular Technologies, Inc.	MULTI-RANK MEMORY MODULE THAT EMULATES A MEMORY MODULE HAVING A DIFFERENT NUMBER OF RANKS	13/568,694	8,990,489
SMART Modular Technologies, Inc.	MULTI-RANK MEMORY MODULE THAT EMULATES A MEMORY MODULE HAVING A DIFFERENT NUMBER OF RANKS	13/972,337	8,626,998
SMART Modular Technologies, Inc.	COMPUTING SYSTEM WITH BACKUP AND RECOVERY MECHANISM AND METHOD OF OPERATION THEREOF	13/940,118	9,779,016
SMART Modular Technologies, Inc.	MEMORY MODULE WITH VERTICALLY ACCESSED INTERPOSER ASSEMBLIES	12/465,560	8,379,391
SMART Modular Technologies, Inc.	EXTENDED UNIVERSAL SERIAL BUS CONNECTIVITY	11/075,407	7,623,355
SMART Modular Technologies, Inc.	COMPUTING SYSTEM WITH NON-DISRUPTIVE FAST MEMORY RESTORE MECHANISM AND METHOD OF OPERATION THEREOF	13/277,720	9,684,520
SMART Modular Technologies, Inc.	EXTENDED CAPACITY MEMORY SYSTEM WITH LOAD RELIEVED MEMORY AND METHOD OF MANUFACTURE THEREOF	13/633,074	9,204,550
SMART Modular Technologies, Inc.	EXTENDED CAPACITY MEMORY SYSTEM WITH LOAD RELIEVED MEMORY AND METHOD OF MANUFACTURE THEREOF	14/942,787	9,939,855
SMART Modular Technologies, Inc.	MEMORY MANAGEMENT SYSTEM WITH BACKUP SYSTEM AND METHOD OF OPERATION THEREOF	14/994,065	
SMART Modular Technologies, Inc.	MEMORY MODULE WITH POWER MANAGEMENT SYSTEM AND METHOD OF OPERATION THEREOF	14/884,369	9,576,615
SMART Modular Technologies, Inc.	SYSTEM AND METHOD FOR TRANSLATION OF SDRAM AND DDR SIGNALS	10/097,687	6,707,756
SMART Modular Technologies, Inc.	NON-VOLATILE MEMORY PACKAGING SYSTEM WITH CACHING AND METHOD OF OPERATION THEREOF	13/303,818	9,424,188
SMART Modular Technologies, Inc.	MEMORY MANAGEMENT SYSTEM WITH POWER SOURCE AND METHOD OF MANUFACTURE THEREOF	13/303,863	9,754,634

Owner	Title	Application #	Number
SMART Modular Technologies, Inc.	MULTI-CHIP PACKAGE	12/416,339	7,956,450
SMART Modular Technologies, Inc.	INTEGRATED CIRCUIT DEVICE SYSTEM WITH ELEVATED STACKED CONFIGURATION AND METHOD OF MANUFACTURE THEREOF	14/231,622	9,648,754
SMART Modular Technologies, Inc.	MEMORY MANAGEMENT SYSTEM WITH MULTIPLE BOOT DEVICES AND METHOD OF OPERATION THEREOF	15/055,448	10,534,619
SMART Modular Technologies, Inc.	SOLID STATE STORAGE SYSTEM WITH LATENCY MANAGEMENT MECHANISM AND METHOD OF OPERATION THEREOF	15/076,433	9,946,469
SMART Modular Technologies, Inc.	SOLID STATE STORAGE SYSTEM WITH LATENCY MANAGEMENT MECHANISM AND METHOD OF OPERATION THEREOF	15/955,566	10,838,806
SMART Modular Technologies, Inc.	INTERCONNECTED MEMORY SYSTEM AND METHOD OF OPERATION THEREOF	15/141,757	10,409,754
SMART Modular Technologies, Inc.	HIGH DENSITY MEMORY MODULE SYSTEM	15/273,385	10,573,354
SMART Modular Technologies, Inc.	MEMORY CONTROLLER FOR HIGH LATENCY MEMORY DEVICES	15/285,305	10,338,821
SMART Modular Technologies, Inc.	FLASH-BASED BLOCK STORAGE SYSTEM WITH TRIMMED SPACE MANAGEMENT AND METHOD OF OPERATION THEREOF ¹	15/294,678	10,474,362
SMART Modular Technologies, Inc.	VIRTUAL TIMER FOR DATA RETENTION	15/388,704	10,185,609
SMART Modular Technologies, Inc.	MEMORY MODULE TEST ADAPTER	15/659,420	10,510,432
SMART Modular Technologies, Inc.	CENTRALIZED BACKUP POWER MODULE	15/709,257	10,551,892
SMART Modular Technologies, Inc.	PORTABLE MODULE SYSTEM	15/789,041	10,488,892

¹ Note that in the Memorandum and Notice of Security Interest in Intellectual Property, the title of this patent included a typographical error: "Flash-based block storage system with trimmed space management and method of operation thereof."

Owner	Title	Application #	Number
SMART Modular Technologies, Inc.	MEMORY CENTRIC COMPUTING STORAGE CONTROLLER SYSTEM	16/889,727	
SMART Modular Technologies, Inc.	CATASTROPHIC EVENT MEMORY BACKUP-SYSTEM	16/889,729	

PATENT

REEL: 058913 FRAME: 0392

RECORDED: 02/07/2022