PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GIOVANNI CAMPARDO	11/10/2021
MASSIMO BORGHI	11/05/2021

RECEIVING PARTY DATA

Name:	STMICROELECTRONICS S.R.L.
Street Address:	VIA C. OLIVETTI, 2
City:	AGRATE BRIANZA (MB)
State/Country:	ITALY
Postal Code:	20864

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	17644942	

CORRESPONDENCE DATA

Fax Number: (972)732-9218

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: (972) 732-1001

Email: DOCKETING@SLATERMATSIL.COM

Correspondent Name: SLATER MATSIL, LLP
Address Line 1: 17950 PRESTON ROAD

Address Line 2: SUITE 1000

Address Line 4: DALLAS, TEXAS 75252

ATTORNEY DOCKET NUMBER:	ST-19-AG-0816US01
NAME OF SUBMITTER:	SHANNON TROTTER
SIGNATURE:	/Shannon Trotter/
DATE SIGNED:	03/17/2022

Total Attachments: 6

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PATENT REEL: 059293 FRAME: 0520

ASSIGNMENT

Application Number:	
Application Filing Date:	
Application Country/Region:	US
Application Title:	PHASE-CHANGE MEMORY AND METHODS FOR
	MANUFACTURING, PROGRAMMING, AND
	READING THEREOF

Assignee:	STMicroelectronics S.r.l.
Assignee being a company,	Italy
corporation, or juristic entity of:	
Assignee's principal place of	Via C. Olivetti, 2, Agrate Brianza (MB), 20864 Italy
business:	

I, the below identified and undersigned inventor or co-inventor, as the case may be, of residence listed below, for and in consideration of good and valuable consideration, the receipt, sufficiency, and adequacy of which are hereby acknowledged, hereby transfer and assign to Assignee all of my rights, title, and interest in and to the following:

- (a) the above identified patent application together with the inventions for which the above identified patent application is made and describes (collectively "the Patent Rights");
- (b) all provisional applications, patent applications, patents, or other similar governmental grants or issuances, in any jurisdiction in the world, (i) from which the Patent Rights directly or indirectly claims priority and/or (ii) for which the Patent Rights directly or indirectly forms a basis for priority;
- (c) any continuations, continuations-in-part, continuing prosecution applications, requests for continuing examinations, divisionals, reissues, reexaminations, extensions, and registrations, in any jurisdiction in the world, of any provisional patent application, patent application, patent, or other governmental grant or issuance set forth in clauses (a) and/or (b) (clauses (a) through (c), collectively the "Assigned Patent Rights");
- (d) any causes of action (whether currently pending, filed, or otherwise) and all other enforcement rights and rights to remedies under, on account of, or related to, any of the Assigned Patent Rights, including, without limitation, all causes of action and other enforcement rights for (i) damages, (ii) injunctive relief, and (iii) other remedies of any kind for past, current, and future infringement or misappropriation in violation of rights, and all rights to sue for any of the foregoing; and
- (e) any and all other rights and interests in any jurisdiction in the world arising out of the Assigned Patent Rights, including, but not limited to, any right to claim priority thereto and/or therefrom.

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All of the rights, title, and interest assigned above shall be held and enjoyed by the Assignee for its own use and enjoyment and for the use and enjoyment of its successors and assigns to the full end of the applicable term for which the aforementioned rights may be granted in any jurisdiction in the world.

I hereby further agree to assist in, sign, and execute all documents needed or desired, now or in the future, to perfect, obtain, and secure the aforementioned rights to Assignee and its successors for any jurisdiction in the world. At the expense of Assignee or its successors, I agree to assist in any legal proceedings, sign all lawful papers, make all lawful oaths, and generally do everything possible to aid Assignee and its affiliates or their successors, as well as their legal representatives, to enforce the aforementioned rights in any jurisdiction in the world.

I hereby grant Assignee, along with the following Assignee representatives, the power to insert in this Assignment any further identification that may be necessary or desirable in order to comply with the rules for recordation of this document in any jurisdiction in the world: All practitioners at USPTO Customer Number 102473.

If part or all of my rights, title, and interest arising out of the Assigned Patent Rights are already owned by Assignee, or its successor(s)/predecessor(s), because (i) I am or was already subject to an obligation to assign such rights, title, and interest to Assignee, or its successor(s)/predecessor(s), by an employment agreement, company policy, applicable law, or otherwise, and/or (ii) such rights, title, and interest have already been assigned by operation of law to Assignee, or its successor(s)/predecessor(s), in accordance with applicable law, and/or (iii) such rights, title, and interest were, from their inception, automatically owned by Assignee, or its successor(s)/predecessor(s), under applicable law, then this document further memorializes, documents, and confirms such prior ownership by Assignee, or its successor(s)/predecessor(s), of such rights, title, and interest for all purposes, including for recording purposes in any jurisdiction in the world.

I confirm and agree that a notarized and/or legalized translation copy of this document in any other language shall have the same force and effect in any jurisdiction in the world as if such translation copy were an original thereof.

If there are co-inventors listed below, the signatures of all the inventors need not appear on the same page, and each inventor may sign this Assignment in multiple counterparts, such that each separately signed counterpart of this Assignment constitutes an original Assignment for the inventor(s) that signed such counterpart. A paper or electronic copy of a signature page shall have the same force and effect as if such copy were an original thereof.

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			Inventor Signatu	re Dute Signed
Inventor Name	Residence		Interned oren-	
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 Massimo Borghi 	110.40	Institu		
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ASSIGNMENT

Application Number:	
Application Filing Date:	
Application Country/Region:	US
Application Title:	PHASE-CHANGE MEMORY AND METHODS FOR
	MANUFACTURING, PROGRAMMING, AND
	READING THEREOF

Assignee:	STMicroelectronics S.r.l.
Assignee being a company,	Italy
corporation, or juristic entity of:	
Assignee's principal place of	Via C. Olivetti, 2, Agrate Brianza (MB), 20864 Italy
business:	

I, the below identified and undersigned inventor or co-inventor, as the case may be, of residence listed below, for and in consideration of good and valuable consideration, the receipt, sufficiency, and adequacy of which are hereby acknowledged, hereby transfer and assign to Assignee all of my rights, title, and interest in and to the following:

- (a) the above identified patent application together with the inventions for which the above identified patent application is made and describes (collectively "the Patent Rights");
- (b) all provisional applications, patent applications, patents, or other similar governmental grants or issuances, in any jurisdiction in the world, (i) from which the Patent Rights directly or indirectly claims priority and/or (ii) for which the Patent Rights directly or indirectly forms a basis for priority;
- (c) any continuations, continuations-in-part, continuing prosecution applications, requests for continuing examinations, divisionals, reissues, reexaminations, extensions, and registrations, in any jurisdiction in the world, of any provisional patent application, patent application, patent, or other governmental grant or issuance set forth in clauses (a) and/or (b) (clauses (a) through (c), collectively the "Assigned Patent Rights");
- (d) any causes of action (whether currently pending, filed, or otherwise) and all other enforcement rights and rights to remedies under, on account of, or related to, any of the Assigned Patent Rights, including, without limitation, all causes of action and other enforcement rights for (i) damages, (ii) injunctive relief, and (iii) other remedies of any kind for past, current, and future infringement or misappropriation in violation of rights, and all rights to sue for any of the foregoing; and
- (e) any and all other rights and interests in any jurisdiction in the world arising out of the Assigned Patent Rights, including, but not limited to, any right to claim priority thereto and/or therefrom.

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All of the rights, title, and interest assigned above shall be held and enjoyed by the Assignee for its own use and enjoyment and for the use and enjoyment of its successors and assigns to the full end of the applicable term for which the aforementioned rights may be granted in any jurisdiction in the world.

I hereby further agree to assist in, sign, and execute all documents needed or desired, now or in the future, to perfect, obtain, and secure the aforementioned rights to Assignee and its successors for any jurisdiction in the world. At the expense of Assignee or its successors, I agree to assist in any legal proceedings, sign all lawful papers, make all lawful oaths, and generally do everything possible to aid Assignee and its affiliates or their successors, as well as their legal representatives, to enforce the aforementioned rights in any jurisdiction in the world.

I hereby grant Assignee, along with the following Assignee representatives, the power to insert in this Assignment any further identification that may be necessary or desirable in order to comply with the rules for recordation of this document in any jurisdiction in the world: All practitioners at USPTO Customer Number 102473.

If part or all of my rights, title, and interest arising out of the Assigned Patent Rights are already owned by Assignee, or its successor(s)/predecessor(s), because (i) I am or was already subject to an obligation to assign such rights, title, and interest to Assignee, or its successor(s)/predecessor(s), by an employment agreement, company policy, applicable law, or otherwise, and/or (ii) such rights, title, and interest have already been assigned by operation of law to Assignee, or its successor(s)/predecessor(s), in accordance with applicable law, and/or (iii) such rights, title, and interest were, from their inception, automatically owned by Assignee, or its successor(s)/predecessor(s), under applicable law, then this document further memorializes, documents, and confirms such prior ownership by Assignee, or its successor(s)/predecessor(s), of such rights, title, and interest for all purposes, including for recording purposes in any jurisdiction in the world.

I confirm and agree that a notarized and/or legalized translation copy of this document in any other language shall have the same force and effect in any jurisdiction in the world as if such translation copy were an original thereof.

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Inventor Name	Residence	Inventor Signature	
	(City, State, Country)		
Giovanni	Via G. Rillosi 9, Bergamo,		
Campardo	24128, Italy		
Massimo Borghi	via Volta, 3, Gerenzano, Varese, 21040, Italy	Marie Bli	05/1/202
			7 1

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