PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT7348985

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
STMICROELECTRONICS, INC.	03/30/2022

RECEIVING PARTY DATA

Name:	STMICROELECTRONICS INTERNATIONAL N.V.
Street Address:	CHEMIN DU CHAMP-DES-FILLES 39
Internal Address:	1228 PLAN-LES-OUATES
City:	GENEVA
State/Country:	SWITZERLAND

PROPERTY NUMBERS Total: 46

Property Type	Number
Patent Number:	8975168
Patent Number:	9368411
Patent Number:	9206526
Patent Number:	9983353
Patent Number:	10324254
Patent Number:	9099565
Patent Number:	9346273
Patent Number:	10131147
Patent Number:	9340023
Patent Number:	9409394
Patent Number:	9744766
Patent Number:	10308023
Patent Number:	9308728
Patent Number:	10124588
Patent Number:	10843465
Patent Number:	9601630
Patent Number:	9711649
Patent Number:	10199505
Patent Number:	10573756
Patent Number:	8987780

Property Type	Number
Patent Number:	9405065
Patent Number:	9759861
Patent Number:	10247881
Patent Number:	10816729
Patent Number:	9548222
Patent Number:	10242862
Patent Number:	9099465
Patent Number:	9331616
Patent Number:	9696363
Patent Number:	9939481
Patent Number:	10352980
Patent Number:	9018765
Patent Number:	9287798
Patent Number:	9866124
Patent Number:	9323633
Patent Number:	8934390
Patent Number:	9191889
Patent Number:	9544847
Patent Number:	9838963
Patent Number:	9980219
Patent Number:	9979710
Patent Number:	9847988
Patent Number:	9232469
Patent Number:	9554324
Patent Number:	9016836
Patent Number:	9016837

CORRESPONDENCE DATA

Fax Number: (972)466-7044

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.

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Correspondent Name: STMICROELECTRONICS, INC.
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Address Line 4: COPPELL, TEXAS 75019

ATTORNEY DOCKET NUMBER:	ST INC. TO STI ASSIGNMENT
NAME OF SUBMITTER:	PATRICK C. R. HOLMES
SIGNATURE:	/Patrick C. R. Holmes/

DATE SIGNED:	05/25/2022

Total Attachments: 9
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ASSIGNMENT

Assignor:	STMICROELECTRONICS, INC.
Assignor being a company, corporation, or juristic entity of:	State of Delaware United States of America
Assignor's principal place of business:	750 Canyon Drive, Suite 300 Coppell, TX 75019 United States of America

Assignee:	STMICROELECTRONICS INTERNATIONAL N.V.
Assignee being a company, corporation, or juristic entity of:	Netherlands
Assignee's principal place of business:	Chemin du Champ-des-Filles 39 1228 Plan-les-Ouates Geneva, Switzerland

WHEREAS, Assignor was assigned certain rights in and to certain inventions, and applications for the Application(s)/Patent(s) listed in the attached Exhibit A; and

WHEREAS, Assignee is desirous of acquiring the entire right, title, and interest in and to the inventions and the application for Application(s)/Patent(s) listed in the attached Exhibit A, and in and to any patent to be obtained therefor and thereon worldwide.

NOW, THEREFORE, for and in consideration of good and valuable consideration, the receipt, sufficiency, and adequacy of which are hereby acknowledged, Assignor hereby transfers and assigns to Assignee, all of Assignor's rights, title, and interest in and to the following:

(a) the Application(s)/Patent(s) listed in the attached Exhibit A together with the inventions for which the Application(s)/Patent(s) listed in the attached Exhibit A is/was (are/were) 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.

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.

Assignor hereby further agrees 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, Assignor 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.

Assignor 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 28899.

If part or all of Assignor's rights, title, and interest arising out of the Assigned Patent Rights are already owned by Assignee, or its successor(s)/predecessor(s), because (i) Assignor is or was already subject to an obligation to assign such rights, title, and interest to Assignee, or its successor(s)/predecessor(s), by an 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.

Assignor and Assignee 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.

The signatures of all the signers need not appear on the same page, and each signer may sign this Assignment in multiple counterparts, such that collectively all the necessary signatures of each separately signed counterpart of this Assignment constitutes an original Assignment. A paper or electronic copy of a signature page shall have the same force and effect as if such copy were an original thereof.

Assignor
STMICROELECTRONICS, INC.

Signature: _____

Print Name: Kevin Fillip

Title: V.P. and General Counsel

Date: March 30, 2022

Acknowledged and accepted by:
Assignee
STMICROELECTRONICS INTERNATIONAL N.V.

Signature: _____

Print Name: Patrick C. R. Holmes

Title: Attorney-in-Fact

Date: March 30, 2022

EXHIBIT A

Country	Application No.	Patent No.	Title (may not match current Title at Patent Office)
China	201410154202.1	ZL201410154202.1	METHOD FOR THE FORMATION OF FIN STRUCTURES FOR FINFET DEVICES
China	201710129007.7	ZL201710129007.7	METHOD FOR THE FORMATION OF FIN STRUCTURES FOR FINFET DEVICES
United States of America	13903630	8975168	METHOD FOR THE FORMATION OF FIN STRUCTURES FOR FINFET DEVICES
United States of America	14596625	9368411	METHOD FOR THE FORMATION OF FIN STRUCTURES FOR FINFET DEVICES
United States of America	13901298	9206526	METHOD FOR THE FORMATION OF NANO-SCALE ON-CHIP OPTICAL WAVEGUIDE STRUCTURES
United States of America	14933095	9983353	METHOD FOR THE FORMATION OF NANO-SCALE ON-CHIP OPTICAL WAVEGUIDE STRUCTURES
United States of America	15962633	10324254	METHOD FOR THE FORMATION OF NANO-SCALE ON-CHIP OPTICAL WAVEGUIDE STRUCTURES
United States of America	14048282	9099565	METHOD OF MAKING A SEMICONDUCTOR DEVICE USING TRENCH ISOLATION REGIONS TO MAINTAIN CHANNEL STRESS
United States of America	13906477	9346273	METHODS OF MAKING AN INKJET PRINT HEAD BY SAWING DISCONTINUOUS SLOTTED RECESSES
United States of America	14941898	10131147	METHODS OF MAKING AN INKJET PRINT HEAD BY SAWING DISCONTINUOUS SLOTTED RECESSES

Country	Application No.	Patent No.	Title (may not match current Title at Patent Office)
United States of America	13906447	9340023	METHODS OF MAKING INKJET PRINT HEADS USING A SACRIFICIAL SUBSTRATE LAYER
United States of America	13906466	9409394	METHOD OF MAKING INKJET PRINT HEADS BY FILLING RESIDUAL SLOTTED RECESSES AND RELATED DEVICES
United States of America	14985984	9744766	METHOD OF MAKING INKJET PRINT HEADS BY FILLING RESIDUAL SLOTTED RECESSES AND RELATED DEVICES
United States of America	15664668	10308023	METHOD OF MAKING INKJET PRINT HEADS BY FILLING RESIDUAL SLOTTED RECESSES AND RELATED DEVICES
United States of America	13906455	9308728	METHOD OF MAKING INKJET PRINT HEADS HAVING INKJET CHAMBERS AND ORIFICES FORMED IN A WAFER AND RELATED DEVICES
United States of America	14984672	10124588	METHOD OF MAKING INKJET PRINT HEADS HAVING INKJET CHAMBERS AND ORIFICES FORMED IN A WAFER AND RELATED DEVICES
United States of America	16165484	10843465	METHOD OF MAKING INKJET PRINT HEADS HAVING INKJET CHAMBERS AND ORIFICES FORMED IN A WAFER AND RELATED DEVICES
United States of America	61705608		QUANTUM DOT ARRAY DEVICES WITH METAL SOURCE AND DRAIN
United States of America	13931096	9601630	TRANSISTORS INCORPORATING METAL QUANTUM DOTS INTO DOPED SOURCE AND DRAIN REGIONS

Country	Application No.	Patent No.	Title (may not match current Title at Patent Office)
United States of America	14983276	9711649	TRANSISTORS INCORPORATING METAL QUANTUM DOTS INTO DOPED SOURCE AND DRAIN REGIONS
United States of America	15620444	10199505	TRANSISTORS INCORPORATING METAL QUANTUM DOTS INTO DOPED SOURCE AND DRAIN REGIONS
United States of America	16228620	10573756	TRANSISTORS INCORPORATING METAL QUANTUM DOTS INTO DOPED SOURCE AND DRAIN REGIONS
United States of America	13907752	8987780	GRAPHENE CAPPED HEMT DEVICE
United States of America	14045640	9405065	HYBRID PHOTONIC AND ELECTRONIC INTEGRATED CIRCUITS
United States of America	14983078	9759861	HYBRID PHOTONIC AND ELECTRONIC INTEGRATED CIRCUITS
United States of America	15491718	10247881	HYBRID PHOTONIC AND ELECTRONIC INTEGRATED CIRCUITS
United States of America	16292047	10816729	HYBRID PHOTONIC AND ELECTRONIC INTEGRATED CIRCUITS
United States of America	14047144	9548222	POST-CMP HYBRID WAFER CLEANING TECHNIQUE
United States of America	15391135	10242862	POST-CMP HYBRID WAFER CLEANING TECHNIQUE
United States of America	14053531	9099465	HIGH ASPECT RATIO VIAS FOR HIGH PERFORMANCE DEVICES
United States of America	61730672		UNIVERSAL DOOR LOCK INTEGRATED CIRCUIT
United States of America	14063163	9331616	INTEGRATED CIRCUIT FOR MOTOR DRIVE CONTROLLER APPLICATIONS

Country	Application No.	Patent No.	Title (may not match current Title at Patent Office)
United States of America	61705321		ARC DETECTION SYSTEM AND METHOD FOR THE SYSTEMS OPERATING IN THE PRESENCE OF WIDEBAND POWERLINE COMMUNICATION SIGNAL
United States of America	14037074	9696363	SYSTEM AND METHOD FOR AN ARC FAULT DETECTOR
United States of America	15603181	9939481	SYSTEM AND METHOD FOR AN ARC FAULT DETECTOR
United States of America	15908953	10352980	SYSTEM AND METHOD FOR DETECTING AN ARC FAULT IN A POWER LINE SIGNAL INCLUDING A COMMUNICATION SIGNAL MODULATED ON AN AC POWER SIGNAL
United States of America	61728034		FLOATING ELECTRODE BARRIER TO PREVENT DENDRITIC ELECTROMECHANICAL SHORT CIRCUITS BETWEEN DIFFERENTIAL TERMINALS (MIGRATION DAM)
United States of America	14027370	9018765	PREVENTING SHORTING DENDRITIC MIGRATION BETWEEN ELECTRODES
China	201310447055.2	ZL201310447055.2	HIGH POWER FACTOR PRIMARY REGULATED OFFLINE LED DRIVER
China	201320598989.1	ZL201320598989.1	DRIVER CIRCUIT
Germany	13195746.6	2753148	HIGH POWER FACTOR PRIMARY REGULATED OFFLINE LED DRIVER
European Patent	13195746.6	2753148	HIGH POWER FACTOR PRIMARY REGULATED OFFLINE LED DRIVER
Japan	2013249831		HIGH POWER FACTOR PRIMARY REGULATED OFFLINE LED DRIVER
United States of America	13706502	9287798	HIGH POWER FACTOR PRIMARY REGULATED OFFLINE LED DRIVER

Country	Application No.	Patent No.	Title (may not match current Title at Patent Office)
United States of America	15011854	9866124	HIGH POWER FACTOR PRIMARY REGULATED OFFLINE LED DRIVER
China	201310671302.7	ZL201310671302.7	DUAL MASTER JTAG METHOD, CIRCUIT, AND SYSTEM
China	201320812812.7	ZL201320812812.7	DUAL-MASTER CONTROLLER AND ELECTRONIC SYSTEM
United States of America	13852223	9323633	DUAL MASTER JTAG METHOD, CIRCUIT, AND SYSTEM
United States of America	13631284	8934390	ENHANCEMENT OF LOW POWER MEDIUM ACCESS STAs
United States of America	61676201		SLOT-BASED POWER SAVE IMPROVEMENT
United States of America	61676173		SLOT-BASED POWER SAVE WITHOUT PS-POLL
United States of America	13952397	9191889	SLOT-BASED POWER SAVE IMPROVEMENT
United States of America	61676196		POWER EFFICIENT PS-POLL
United States of America	13685341		POWER EFFICIENT PS-POLL
United States of America	15213107	9544847	POWER EFFICIENT PS-POLL
United States of America	15365600	9838963	POWER EFFICIENT PS-POLL
United States of America	15808592	9980219	POWER EFFICIENT PS-POLL
United States of America	61676207		SYSTEM AND METHOD FOR SINGLE-SSID AND DUAL-SSID ENHANCEMENTS
United States of America	13685308	9979710	SINGLE-SSID AND DUAL-SSID ENHANCEMENTS

Country	Application No.	Patent No.	Title (may not match current Title at Patent Office)
United States of America	14949293	9847988	SINGLE-SSID AND DUAL-SSID ENHANCEMENTS
United States of America	61701213		EARLY ENDING OF FRAME RECEPTION
United States of America	14025456	9232469	EARLY ENDING OF FRAME RECEPTION
United States of America	61714507		802.11ai FILS (FAST INITIAL LINK SETUP) FRAME CONTENT
United States of America	14051583	9554324	FAST INITIAL LINK SETUP (FILS) FRAME CONTENT FOR A WIRELESS NETWORK
United States of America	13893472	9016836	INK JET PRINTHEAD WITH POLARITY-CHANGING DRIVER FOR THERMAL RESISTORS
United States of America	13893482	9016837	INK JET PRINTHEAD DEVICE WITH COMPRESSIVE STRESSED DIELECTRIC LAYER