# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7696265

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
STMICROELECTRONICS (SHENZHEN) R&D CO., LTD.	11/16/2022

## **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: 16**

Property Type	Number
Patent Number:	10325584
Patent Number:	9287227
Patent Number:	9466557
Patent Number:	9859196
Patent Number:	9365415
Patent Number:	9177939
Patent Number:	9836075
Patent Number:	9811101
Patent Number:	9454166
Patent Number:	9946282
Patent Number:	9525385
Patent Number:	9436206
Patent Number:	9331672
Patent Number:	9490786
Patent Number:	9323273
Patent Number:	9653990

#### **CORRESPONDENCE DATA**

(972)466-7044 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.

**PATENT REEL: 062101 FRAME: 0042** 

507649130

**Phone:** 972-466-7280

**Email:** angie.rodriguez@st.com

Correspondent Name: STMICROELECTRONICS, INC.

Address Line 1: 750 CANYON DRIVE

Address Line 2: SUITE 300

Address Line 4: COPPELL, TEXAS 75019

ATTORNEY DOCKET NUMBER:	SHENZHEN/STI (2013 IDS)
NAME OF SUBMITTER:	PATRICK C. R. HOLMES
SIGNATURE:	/Patrick C. R. Holmes/
DATE SIGNED:	12/15/2022

### **Total Attachments: 7**

source=Shenzhen to STI executed patent assignment 11-16-2022 (2013)#page1.tif source=Shenzhen to STI executed patent assignment 11-16-2022 (2013)#page2.tif source=Shenzhen to STI executed patent assignment 11-16-2022 (2013)#page3.tif source=Shenzhen to STI executed patent assignment 11-16-2022 (2013)#page4.tif source=Shenzhen to STI executed patent assignment 11-16-2022 (2013)#page5.tif source=Shenzhen to STI executed patent assignment 11-16-2022 (2013)#page6.tif source=Shenzhen to STI executed patent assignment 11-16-2022 (2013)#page7.tif

PATENT REEL: 062101 FRAME: 0043

#### ASSIGNMENT

Assignor:	STMICROELECTRONICS (SHENZHEN) R&D CO., LTD.
Assignor being a company, corporation, or juristic entity of:	China
Assignor's principal place of business:	B501-B503 & 6F, Block B, TCL R&D Tower, No. 6, Southern No. 1 Road, South District, Hi-Tech Industrial Park, Yuehai, Nanshan, Shenzhen, China 518057

Assignee:	STMICROELECTRONICS INTERNATIONAL N.V.
Assignee being a company, corporation, or juristic entity of:	Netherlands
Assignee's principal place of	Chemin du Champ-des-Filles 39
business:	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");

STMicroelectronics (Shenzhen) R&D to STI

Page 1 of 7

- (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.

STMicroelectronics (Shenzhen) R&D to STI

Page 2 of 7

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	FEWTDONICS (SHENZHEN) DOD CO. 1 TO
Semicino,	ELECTRONICS (SHENZHEN) R&D CO., LTD.
Signature:	
Print Name:	Join wy Skiz
The state of the s	Executive Vice-President
Title:	Finance, Global Shared Services and Systems  This pelectronics
Date:	16 November 2022

Acknowledged and accepted by:

Assignee

STMICROELECTRONICS INTERNATIONAL N.V.

enginature.

Print Name: Patrick C. R. Holmes

Title: Attorney-in-Fact

Date: November 29, 2022

## **EXHIBIT A**

Country	Application No.	Patent No.	Title (may not match current Title at Patent Office)
Italy	TO2014A001028	1427485	ACTIVE NOISE
•		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CANCELLING DEVICE AND
			METHOD OF ACTIVELY
			CANCELLING ACOUSTIC
			NOISE
United	14863228	10325584	ACTIVE NOISE
States of		•	CANCELLING DEVICE AND
America			METHOD OF ACTIVELY
			CANCELLING ACOUSTIC
			NOISE
China	201310629973.7		ELECTRONIC DEVICE WITH
			FIRST AND SECOND
	M		CONTACT PADS AND
			RELATED METHODS
China	201320783051.7	ZL201320783051.7	ELECTRONIC DEVICE
United	14547459	9287227	ELECTRONIC DEVICE WITH
States of			FIRST AND SECOND
America			CONTACT PADS AND
			RELATED METHODS
United	14984082	9466557	ELECTRONIC DEVICE WITH
States of			FIRST AND SECOND
America			CONTACT PADS AND
			RELATED METHODS
United	15251127	9859196	ELECTRONIC DEVICE WITH
States of			PERIPHERY CONTACT
America			PADS SURROUNDING
~			CENTRAL CONTACT PADS
China	201410007142.0	ZL201410007142.0	COMPACT ELECTRONIC
			PACKAGE WITH MEMS IC
OI:	20140001017071		AND RELATED METHODS
China	201420013179.X	ZL201420013179.X	ELECTRONIC DEVICE
United	14587324	9365415	COMPACT ELECTRONIC
States of			PACKAGE WITH MEMS IC
America			AND RELATED METHODS
China	201310629974.1	ZL201310629974.1	LEADLESS SMA PACKAGE
:			AND METHOD OF
			MANUFACTURING
			THEREOF
224			
China	201320777456.X	ZL201320777456.X	LEADLESS SMA PACKAGE
			AND ELECTRONIC DEVICE

STMicroelectronics (Shenzhen) R&D to STI

Page 4 of 7

Country	Application No.	Patent No.	Title (may not match current
			Title at Patent Office)
United	14553799	9177939	LEADLESS SURFACE
States of			MOUNT ASSEMBLY
America			PACKAGE AND METHOD
			OF MANUFACTURING THE
			SAME
China	201310557074.0	ZL201310557074.0	PEAK CURRENT MODE DC-
			DC CONVERTER
China	201310521075.X	ZL201310521075.X	DEVICE AND METHOD FOR
			GENERATING DIRECT
			CURRENT BIAS
China	201320673342.0	ZL201320673342.0	DEVICE FOR GENERATING
	20.020070012.0	23201320013312.0	DIRECT CURRENT BIAS
			DIRECT CORRENT BIAS
United	14521536	9836075	METHOD AND APPARATUS
States of			FOR GENERATING A
America			DIRECT CURRENT BIAS
China	201410305904.5	ZL201410305904.5	POWER CONVERTER AND
Oma	201110303704.3	201410303704.5	METHOD FOR ADJUSTING
			]
			LINE TRANSIENT
			RESPONSE FOR POWER
China	201420257000.0	77. 201.42027.6020.0	CONVERTER
	201420356999.9	ZL201420356999.9	POWER CONVERTER
United	14663165	9811101	POWER CONVERTER AND
States of			METHOD FOR
America			REGULATING LINE
			TRANSIENT RESPONSE OF
			THE POWER CONVERTER
China	201410007119.1	ZL201410007119.1	LDO REGULATOR WITH
			IMPROVED LOAD
			TRANSIENT
			PERFORMANCE FOR
			INTERNAL POWER SUPPLY
China	201420013150.1	ZL201420013150.1	CIRCUIT
China	201710977876.5	ZL201710977876.5	LDO REGULATOR WITH
	201710777070.5	20201710777070.5	IMPROVED LOAD
			TRANSIENT
			PERFORMANCE FOR
United	14543294	0454166	INTERNAL POWER SUPPLY
	14343294	9454166	LDO REGULATOR WITH
States of			IMPROVED LOAD
America			TRANSIENT
			PERFORMANCE FOR
			INTERNAL POWER SUPPLY

Country	Application No.	Patent No.	Title (may not match current Title at Patent Office)
United States of America	15244289	9946282	LDO REGULATOR WITH IMPROVED LOAD TRANSIENT PERFORMANCE FOR INTERNAL POWER SUPPLY
China	201410045780.1	ZL201410045780.1	DEVICE AND METHOD FOR REDUCING CLIPPING IN AN AMPLIFIER
China	201420057035.4	ZL201420057035.4	A CIRCUIT, A CLASS D PULSE-WIDTH MODULATED AMPLIFIER, AN INTEGRATED CIRCUIT AND A SYSTEM
United States of America	14534727	9525385	DEVICE AND METHOD FOR REDUCING CLIPPING IN AN AMPLIFIER
China	201410007047.0	ZL201410007047.0	TEMPERATURE AND PROCESS COMPENSATED CURRENT REFERENCE CIRCUITS
China	201420013208.2	ZL201420013208.2	A REFERENCE CURRENT GENERATOR CIRCUIT
United States of America	14519225	9436206	TEMPERATURE AND PROCESS COMPENSATED CURRENT REFERENCE CIRCUITS
China	201410320669.9	ZL201410320669.9	DRIVER CIRCUIT WITH GATE CLAMP SUPPORTING STRESS TESTING
China	201420371939.4	ZL201420371939.4	ELECTRONIC CIRCUITS AND DRIVE CIRCUITS
China	201810875748.4	ZL201810875748.4	DRIVER CIRCUIT WITH GATE CLAMP SUPPORTING STRESS TESTING
United States of America	14449232	9331672	DRIVER CIRCUIT WITH GATE CLAMP SUPPORTING STRESS TESTING
United States of America	15088898	9490786	DRIVER CIRCUIT WITH GATE CLAMP SUPPORTING STRESS TESTING
China	201410448786.3	ZL201410448786.3	CURRENT STEERING MODE DIGITAL-TO-ANALOG CONVERTER CIRCUIT CONFIGURED TO

Country	Application No.	Patent No.	Title (may not match current Title at Patent Office)
			GENERATE VARIABLE OUTPUT CURRENT
China	201420509676.9	ZL201420509676.9	CURRENT STEERING MODE DIGITAL-TO-ANALOG CONVERTER CIRCUIT CONFIGURED TO GENERATE VARIABLE OUTPUT CURRENT
United States of America	14504494	9323273	CURRENT STEERING MODE DIGITAL-TO-ANALOG CONVERTER CIRCUIT CONFIGURED TO GENERATE VARIABLE OUTPUT CURRENT
China	201510818302.4	ZL201510818302.4	NEGATIVE CHARGE PUMP WITH SOFT START
China	201520931713.X	ZL201520931713.X	A CIRCUIT
United States of America	14955116	9653990	NEGATIVE CHARGE PUMP WITH SOFT START

STMicroelectronics (Shenzhen) R&D to STI

**RECORDED: 12/15/2022** 

Page 7 of 7