

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT7620680

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
Name		Execution Date
STMICROELECTRONICS ASIA PACIFIC PTE LTD		10/26/2022
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: 25		
Property Type	Number	
Patent Number:	9529627	
Patent Number:	10140958	
Patent Number:	9317304	
Patent Number:	9552477	
Patent Number:	9977546	
Patent Number:	9524697	
Patent Number:	9006063	
Patent Number:	9367169	
Patent Number:	9183453	
Patent Number:	9703433	
Patent Number:	9846520	
Patent Number:	10185454	
Patent Number:	9092856	
Patent Number:	9703946	
Patent Number:	9335876	
Patent Number:	9675368	
Patent Number:	9772696	
Patent Number:	9626049	
Patent Number:	9379650	
Patent Number:	8963589	

PATENT

Property Type	Number
Patent Number:	9710104
Patent Number:	9971421
Patent Number:	10394349
Patent Number:	9523994
Patent Number:	9864395

CORRESPONDENCE DATA

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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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Address Line 4: COPPELL, TEXAS 75019

ATTORNEY DOCKET NUMBER:	ASIA PAC/STI (2013/2022)
NAME OF SUBMITTER:	PATRICK C. R. HOLMES
SIGNATURE:	/Patrick C. R. Holmes/
DATE SIGNED:	11/01/2022

Total Attachments: 6
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ASSIGNMENT

Assignor:	STMICROELECTRONICS ASIA PACIFIC PTE LTD
Assignor being a company, corporation, or juristic entity of:	Singapore
Assignor's principal place of business:	5A Serangoon North Avenue 5 Singapore, Singapore 554574

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.

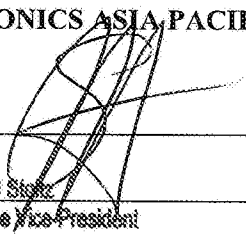
If part or all of Assignor's rights, title, and interest arising out of the Assigned Patent Rights are already owned by Assignee, or its successor(s)/predecessor(s), because (i) Assignor is or was already subject to an obligation to assign such rights, title, and interest to Assignee, or its successor(s)/predecessor(s),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

Signature:  _____

Print Name: Bertrand Stutz _____

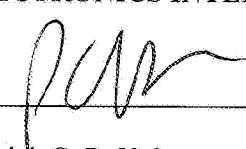
Title: Executive Vice President
Finance, Global Shared Services and Systems
STMicroelectronics

Date: 26 October 2022

Acknowledged and accepted by:

Assignee

STMICROELECTRONICS INTERNATIONAL N.V.

Signature:  _____

Print Name: Patrick C. R. Holmes

Title: Attorney-in-Fact

Date: October 31, 2022

EXHIBIT A

Country	Application No.	Patent No.	Title (may not match current Title at Patent Office)
European Patent	13305326.4		MANAGING MULTIPLE SYSTEMS IN A COMPUTER DEVICE
United States of America	14219835	9529627	MANAGING MULTIPLE SYSTEMS IN A COMPUTER DEVICE
United States of America	15354434	10140958	MANAGING MULTIPLE SYSTEMS IN A COMPUTER DEVICE
European Patent	13305324.9		LAUNCHING MULTIPLE APPLICATIONS IN A PROCESSOR
United States of America	14218623	9317304	LAUNCHING MULTIPLE APPLICATIONS IN A PROCESSOR
European Patent	13305325.6		RESOURCE MANAGEMENT IN A PROCESSOR
United States of America	14218467	9552477	RESOURCE MANAGEMENT IN A PROCESSOR
United States of America	14319715	9977546	DETERMINING FINGER SEPARATION THROUGH GROOVE ANALYSIS IN A TOUCH SCREEN DEVICE
United States of America	14474960	9524697	CAPACITIVE TOUCH SCREEN DISPLAY SYSTEM INCLUDING CIRCUITRY TO ADDRESS DISPLAY PERTURBATIONS INDUCED BY PANEL SENSING
United States of America	13931637	9006063	TRENCH MOSFET
United States of America	14231408	9367169	METHOD, CIRCUIT, AND SYSTEM FOR HOVER AND GESTURE DETECTION WITH A TOUCH SCREEN

Country	Application No.	Patent No.	Title (may not match current Title at Patent Office)
United States of America	14069181	9183453	BANDING NOISE DETECTOR FOR DIGITAL IMAGES
United States of America	14461977	9703433	SYSTEM AND METHOD OF COMMUNICATION BETWEEN A CAPACITIVE TOUCH SCREEN AND AN ACTIVE STYLUS
United States of America	15616294	9846520	SYSTEM AND METHOD OF COMMUNICATION BETWEEN A CAPACITIVE TOUCH SCREEN AND AN ACTIVE STYLUS
United States of America	15813906	10185454	SYSTEM AND METHOD OF COMMUNICATION BETWEEN A CAPACITIVE TOUCH SCREEN AND AN ACTIVE STYLUS
United States of America	14068656	9092856	RECURSIVE DE-BANDING FILTER FOR DIGITAL IMAGES
United States of America	14231360	9703946	SECURE PAIRING METHOD, CIRCUIT, AND SYSTEM FOR AN INTELLIGENT INPUT DEVICE AND AN ELECTRONIC DEVICE
United States of America	14218079	9335876	CROSS-SHAPED TOUCHSCREEN PATTERN
United States of America	14272455	9675368	TOUCH PANEL SCANNING METHOD, CIRCUIT AND SYSTEM
United States of America	14199510	9772696	SYSTEM AND METHOD FOR PHASE ERROR COMPENSATION IN SYNCHRONIZED DEVICES
United States of America	14269295	9626049	CAPACITIVE TOUCH SCREEN INCLUDING A FIRST SENSOR PATTERN FOR MUTUAL SENSING AND A SECOND SENSOR PATTERN FOR SELF SENSING

Country	Application No.	Patent No.	Title (may not match current Title at Patent Office)
United States of America	14248784	9379650	ENHANCED INDUCTIVE SENSE USING MUTUAL INDUCTANCE
United States of America	14152270	8963589	RAMP GENERATOR CIRCUIT
United States of America	14245915	9710104	TOUCH SCREEN WITH PALM REJECTION IN THE PRESENCE OF CHARGER NOISE
United States of America	14199210	9971421	SYSTEM AND METHOD FOR IMPROVED SYNCHRONIZATION BETWEEN DEVICES
United States of America	15953017	10394349	SYSTEM AND METHOD FOR IMPROVED SYNCHRONIZATION BETWEEN DEVICES
United States of America	14201590	9523994	TEMPERATURE INSENSITIVE TRANSIENT CURRENT SOURCE
China	201710399144.2	ZL201710399144.2	BASE CURRENT COMPENSATION FOR A BJT CURRENT MIRROR
China	201720623366.3	ZL201720623366.3	CURRENT MIRROR CIRCUIT
Germany (Federal Republic of)	17176566.2	3330829	BASE CURRENT COMPENSATION FOR A BJT CURRENT MIRROR
European Patent	17176566.2	3330829	BASE CURRENT COMPENSATION FOR A BJT CURRENT MIRROR
United States of America	15367628	9864395	BASE CURRENT COMPENSATION FOR A BJT CURRENT MIRROR