PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5999559

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YASUNARI UMEMOTO	02/07/2020
ISAO OBU	02/11/2020
KAORU IDENO	02/10/2020
SHIGEKI KOYA	02/07/2020

RECEIVING PARTY DATA

Name:	MURATA MANUFACTURING CO., LTD.	
Street Address:	10-1, HIGASHIKOTARI 1-CHOME, NAGAOKAKYO-SHI	
City:	KYOTO-FU	
State/Country:	JAPAN	
Postal Code:	617-8555	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16810492

CORRESPONDENCE DATA

Fax Number: (703)390-1277

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: (703)390-9051

Email: info@sbpatentlaw.com

STUDEBAKER & BRACKETT PC **Correspondent Name:** 8255 GREENSBORO DRIVE Address Line 1:

Address Line 2: SUITE 300

Address Line 4: TYSONS, VIRGINIA 22102

ATTORNEY DOCKET NUMBER:	002000-MM0677	
NAME OF SUBMITTER:	JOSEPH J. BUCZYNSKI	
SIGNATURE:	/Joseph J. Buczynski/	
DATE SIGNED:	03/05/2020	
This document serves as an Oath/Declaration (37 CFR 1.63).		

Total Attachments: 8

PATENT REEL: 052031 FRAME: 0356

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PATENT REEL: 052031 FRAME: 0357



Title of Invention:		
SEMICONDUCTOR DEVICE		
私は、以下に記名された発明者として、ここに下記の通り 宣言する:	As a below named inventor, I hereby declare that:	
本宣言書は、以下の出願に対するものである:	This declaration is directed to:	
□ 添付された出願、あるいは、 □ 米国出願番号またはPCT国際出願番号は、 □ であり、且つ の日に出願された出願 (該当する場合)	The attached application, or United States application or PCT international application number filed on	
上記出願書 (明細書及び図面) は、私が作成したものか、あるいは私がその作成を許可したものである。	The above-identified application was made or authorized to be made by me.	
私は、本米国出願の請求範囲で記載された発明に 対する原発明者であるか、或いは、原共同発明者 であると信じている。	I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.	
私は、ここでの宣誓または陳述において故意に偽りを述べた場合、合衆国法典第18巻第1001条に基づき、罰金あるいは5年以下の懲役、または、両方の懲罰を受けることを認める。	I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.	
	STATEMENT OF ACCURATE TRANSLATION IN ACCORDANCE WITH 37 CFR 1.69(b):	
	The Declaration and Assignment for Patent and Design Applications is an accurate translation of the corresponding English language Declaration and Assignment for Patent and Design Applications	
	Signature: K	
	Date: <u>11/15/2012</u>	



WHEREAS the undersigned, hereinafter referred to as the assignor, has invented a certain improvement relating to the above identified application.

improvement relating to the above identified approprient.		
The inventor declaration for said application is combined herewith.		
[X] said application to be filed in the United States Patent and Trademark Office;		
[] said application having been filed in the United States Patent and Trademark Office on,authorization being hereby given to the practitioners associated with STUDEBAKER & BRACKETT PC's CUSTOMER NUMBER 78198, to insert here in parentheses (Application Serial No) the application serial number of said application when known;		
[] said application having been filed under the Patent Cooperation Treaty on,		
as Serial No, the United States of America being designated.		
AND WHEREAS Murata Manufacturing Co., Ltd. of 10-1, Higashikotari 1-chome, Nagaokakyo-shi, Kyoto-fu 617-8555 JAPAN, hereinafter referred to as the assignee, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof;		
NOW, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assigner, the receipt of which is hereby acknowledged, said assigner hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the full and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.		
AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof.		
AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.		
The undersigned hereby grants the law firm of STUDEBAKER & BRACKETT PC the power to insert on the Assignment portion of this combined Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.		
This combined Declaration and Assignment has been executed by the undersigned on the date opposite the undersigned name.		
発明者氏名/ Legal Name of Inventor Yasunari UMEMOTO		
発明者の署名/ Signature 日付/ Date 日付/ Date		



Title of Invention:		
SEMICONDUCTOR DEVICE		
私は、以下に記名された発明者として、ここに下記の通り 宣言する:	As a below named inventor, I hereby declare that:	
本宣言書は、以下の出願に対するものである:	This declaration is directed to:	
□ 添付された出願、あるいは、 □ 米国出願番号またはPCT国際出願番号は、 であり、且つ の日に出願された出願 (該当する場合)	☐ The attached application, or ☐ United States application or PCT international application number filed on	
上記出願書(明細書及び図面)は、私が作成したものか、あるいは私がその作成を許可したものである。	The above-identified application was made or authorized to be made by me.	
私は、本米国出願の請求範囲で記載された発明に 対する原発明者であるか、或いは、原共同発明者 であると信じている。	I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.	
私は、ここでの宣誓または陳述において故意に偽りを述べた場合、合衆国法典第18巻第1001条に基づき、罰金あるいは5年以下の懲役、または、両方の懲罰を受けることを認める。	I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.	
	STATEMENT OF ACCURATE TRANSLATION IN ACCORDANCE WITH 37 CFR 1.69(b):	
	The Declaration and Assignment for Patent and Design Applications is an accurate translation of the corresponding English language Declaration and Assignment for Patent and Design Applications	
	Signature:	
	Date: <u>11/15/2012</u>	



WHEREAS the undersigned, hereinafter referred to as the assignor, has invented a certain improvement relating to the above identified application.

The inventor declaration for said application is combined herewith.		
[X] said application to be filed in the United States Patent and Trademark Office;		
authorization being hereby given to the	the United States Patent and Trademark Office on, practitioners associated with <u>STUDEBAKER & BRACKETT PC's</u> rt here in parentheses (Application Serial No) the ation when known;	
[] said application having been filed un as	der the Patent Cooperation Treaty on,	
Serial No	_, the United States of America being designated.	
Kyoto-fu 617-8555 JAPAN, hereinafter title and interest in and to said application	ifacturing Co., Ltd. of 10-1. Higashikotari 1-chome, Nagaokakyo-shi, referred to as the assignee, is desirous of acquiring the entire right, on, including any and all divisions and continuations thereof, and in atents which may be granted therefor, including any and all renewals,	
paid by said assignee to said assignor, assigns, sells and transfers to said assigneetclusive right, title and interest in and thereof, and in and to said invention and all renewals, reissues and prolonge assigns, to have, hold, exercise and enjointinuations thereof, and the said inversingly any and all renewals, reissues advantages in anywise arising from or a such patents when granted, including and benefit of said assignee, and said a	tion of One Dollar (\$1.00), and other good and valuable consideration the receipt of which is hereby acknowledged, said assignor hereby gnee, and said assignee's successors and assigns, the full and to said application, including any and all divisions and continuations d any and all patents which may be granted therefor, including any ations thereof; said assignee, and said assignee's successors and joy the said application, including any and all divisions and intion and any and all patents which may be granted therefor, as and prolongations thereof, with all the rights, powers, privileges and appertaining thereto, for and during the term or terms of any and all my and all renewals, reissues and prolongations thereof, for the use assignee's successors and assigns, in as ample and beneficial a bould have held and enjoyed the same, if this assignment had not	
	les to perform, upon the request of said assignee, or said assignee's relating to the obtaining or to the asserting of said patents, including ongations thereof.	
	and requests the Commissioner of Patents and Trademarks to issue on any and all divisions and continuations thereof, to said assignee, signs, in accordance herewith.	
The undersigned hereby grants the law firm of STUDEBAKER & BRACKETT PC the power to insert on the Assignment portion of this combined Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.		
This combined Declaration and opposite the undersigned name.	Assignment has been executed by the undersigned on the date	
発明者氏名/ Legal Name of Inventor	Isao OBU	
発明者の署名/ Signature	日付/ Date	



Title of Invention:	
SEMICONDL	ICTOR DEVICE
私は、以下に記名された発明者として、ここに下記の通り 宣言する:	As a below named inventor, I hereby declare that:
本宣言書は、以下の出願に対するものである:	This declaration is directed to:
□ 添付された出願、あるいは、 □ 米国出願番号またはPCT国際出願番号は、 であり、且つ の日に出願された出願 (該当する場合)	The attached application, or United States application or PCT international application number filled on
上記出願書 (明細書及び図面) は、私が作成したものか、あるいは私がその作成を許可したものである。	The above-identified application was made or authorized to be made by me.
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	Signature: X -
	Date: <u>11/15/2012</u>



WHEREAS the undersigned, hereinafter referred to as the assignor, has invented a certain improvement relating to the above identified application.

, " " "		
The inventor declaration for said application is combined here	vith.	
[X] said application to be filed in the United States Patent and Trademark Office;		
[] said application having been filed in the United States Patent and Trademark Office on, authorization being hereby given to the practitioners associated with <u>STUDEBAKER & BRACKETT PC's CUSTOMER NUMBER 78198</u> , to insert here in parentheses (Application Serial No) the application serial number of said application when known;		
[] said application having been filed under the Patent Cooper	ation Treaty on,	
Serial No, the United States of	America being designated.	
AND WHEREAS <u>Murata Manufacturing Co., Ltd.</u> of <u>10-1</u> , <u>Higashikotari 1-chome</u> , <u>Nagaokakyo-shi</u> , <u>Kyoto-fu 617-8555 JAPAN</u> , hereinafter referred to as the assignee, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof;		
NOW, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the full and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.		
AND said assignor hereby agrees to perform, upon the successors or assigns, any and all acts relating to the obtaining any and all renewals, reissues and prolongations thereof.		
AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.		
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This combined Declaration and Assignment has been executed by the undersigned on the date opposite the undersigned name.		
発明者氏名/ Legal Name of Inventor Kaon	ı IDENO	
発明者の署名/ Signature OKooru Idano 日付/ C	ate February 10, 2018	



Title of Invention:		
SEMICONDUCTOR DEVICE		
私は、以下に記名された発明者として、ここに下記の通り 宣言する:	As a below named inventor, I hereby declare that:	
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	Signature: 11/15/2012	
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RECORDED: 03/05/2020

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NOW, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the full and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.		
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This combined Declaration and Assignment has been executed by the undersigned on the date opposite the undersigned name.		
発明者氏名/ Legal Name of Inventor Sh	nigeki KOYA	
発明者の署名/ Signature Shigehi Roya 日午	t/ Date February 7, 2020	
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