PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5591617

SUBMISSION TYPE: NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YUKIO ISHIKAWA	06/06/2019
HIDETOSHI TAKAYAMA	06/11/2019
HIROKAZU OOTA	06/11/2019
SHUUICHI KANEKO	06/07/2019

RECEIVING PARTY DATA

Name:	SUMITOMO ELECTRIC INDUSTRIES, LTD.	
Street Address:	5-33, KITAHAMA 4-CHOME, CHUO-KU	
City:	OSAKA-SHI, OSAKA	
State/Country:	JAPAN	
Postal Code:	stal Code: 541-0041	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16473710

CORRESPONDENCE DATA

Fax Number: (202)204-0289

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: 202-842-8800

Email: dcpatentfiling@dbr.com

Correspondent Name: DRINKER BIDDLE & REATH (DC)

Address Line 1: 1500 K STREET, N.W.

Address Line 2: SUITE 1100

Address Line 4: WASHINGTON, D.C. 20005-1209

ATTORNEY DOCKET NUMBER: 201917-0315-00-US		
NAME OF SUBMITTER:	TER: PETER J. SISTARE	
SIGNATURE:	/Peter J. Sistare/	
DATE SIGNED: 06/26/2019		
	This document serves as an Oath/Declaration (37 CFR 1.63).	
'		

Total Attachments: 3

PATENT REEL: 049592 FRAME: 0554 source=201917_0315__declassgn#page1.tif source=201917_0315__declassgn#page2.tif source=201917_0315__declassgn#page3.tif

> PATENT REEL: 049592 FRAME: 0555

ATTORNEY DOCKET NO.:

SOLE/JOINT INVENTION

(U.S. Rights Only)

Page 1 of 3

COMBINED DECLARATION AND ASSIGNMENT

WHEREAS I/WE, the below-named inventor(s) – hereinafter referred to as Assignor(s) – have made an invention entitled:

Gallium-Arsenide-Based Compound Semiconductor Crystal and Wafer Group

for which I/WE are filing an application for United States Letters Patent, the application being the one identified in the Declaration set forth below; and

WHEREAS, <u>Sumitomo Electric Industries</u>, <u>Ltd.</u>, a corporation of <u>Japan</u>, whose post office address is <u>5-33</u>, <u>Kitahama 4-chome</u>, <u>Chuo-ku</u>, <u>Osaka-shi</u>, <u>Osaka 541-0041 Japan</u> (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention, the application for United States Letters Patent on this invention and the Letters Patent to issue upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration, the receipt of which from Assignee is hereby acknowledged, I/WE, as Assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisionals, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and I/WE hereby authorize and request the United States Patent and Trademark Office to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY covenant that I/WE have the full right to convey the interest assigned by this Assignment, and I/WE have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, and all rights to claim priority on the basis of such applications, make all rightful oaths or the like, and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns;

IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s) in the appropriate space below,

DC01/3306284.1

ATTORNEY DOCKET NO.:
SOLE/JOINT INVENTION
(U.S. Rights Only)
Page 2 of 3

出願データシート(連邦規則法典第37編規則1.76)を用いた 実用又は意匠出願のための、連邦規則法典第37編規則1.63の 宣言書として、下記に記名され、署名のある各発明者は、次 のように宣言する。	AS A DECLARATION UNDER 37 C.F.R. § 1.63, for a utility or design application using an Application Data Sheet (37 C.F.R. § 1.76), each below-named inventor for which a signature has been provided hereby declares that:			
この宣言書は次に向けられたものである (次の2つの ボックスのうち1つにチェックを入れてください) :	This Declaration is directed to (please check one of the following two boxes):			
添付された出願、又は 出願番号 である米国出願若しくは PCT 国際出願。	The attached application, or United States application or PCT international application number PCT/JP2017/033309 filed on September 14, 2017			
上記の出願は、私によってなされたか、又は私によって なされるよう権限を与えられたものである。	The above-identified application was made or authorized to be made by me.			
私は、この出願で請求されている発明の最初の発明者又は 最初の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、特許請求の範囲を含むこの出願の内容を検討し、且つ 理解した。	I have reviewed and understand the contents of the application, including the claims.			
私は、連邦規則法典第37編規則1.56に規定されているように、特許性について私が知っているすべての重要な情報を 庁に開示する義務があることを知っている。	I am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 C.F.R. § 1,56.			
私は、この宣言書においてなされたいかなる故意による虚偽 の供述は、合衆国法典第 18 編第 1001 条の下、罰金若しくは 5 年以下の懲役又はその両方に処される事をここに認める。	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.			
注記:もし前もって提出されていないのであれば、発明主体全員の 名前を挙げた出願データシート (PTO/AIA/14 又はそれに相当する もの)をこの用紙に添付しなければならない。	Note: An application data sheet (PTO/AIA/14 or equivalent) naming the entire inventive entity must accompany this form if not submitted previously.			
STATEMENT OF ACCURATE TRANSLATION UNDER 37 C.F.R. § 1.69(b):				
To the best of my knowledge, the English-language translation provided in this document is an accurate translation.				
Signature: Masahiro Noda				

DC01/3306284.1

ATTORNEY DOCKET NO.:

SOLE/JOINT INVENTION (U.S. Rights Only) Page 3 of 3

唯一または第一発明者の法律上の氏名	LEGAL NAME OF SOLE/FIRST ASSIGNOR/INVENTOR
	Delat Name, Walder ICHHI AWA
氏名:	Tune 06 2014
日付:	Signature: Yukio ISHIKAWA
署名:	Signature. 14 No. 2011 (17)
第二発明者の法律上の氏名	LEGAL NAME OF SECOND ASSIGNOR/INVENTOR
氏名:	Print Name: Hidetoshi TAKAYAMA
	June 11 2019
日付:	a: Waland: TAKAYANA
署名:	
第三発明者の法律上の氏名 	LEGAL NAME OF THIRD ASSIGNOR/INVENTOR
氏名:	Print Name: Hirokazu OOTA
日付:	
署名:	0.1-
第四発明者の法律上の氏名	
MATTER AND PROPERTY OF A PARTY OF	LEGAL NAME OF FOURTH ASSIGNOR/INVENTOR
氏名:	Print Name: Shuuichi KANEKO
日付:	
署名:	Signature: Shwichi KANEKO
第五発明者の法律上の氏名	LEGAL NAME OF FIFTH ASSIGNOR/INVENTOR
氏名:	Print Name:
	Date:
署名:	
第六発明者の法律上の氏名	
別人元切名では中土でたね。	LEGAL NAME OF SIXTH ASSIGNOR/INVENTOR
氏名:	Print Name:
日付:	Date:
署名:	Signature:
 発明者のリストは添付のページに続く: □ はい □ いいえ	Name(s) of additional Assignor(s)/Inventor(s) attached: ☐ Yes ☒ No
THE THE PROPERTY OF THE PROPER	Name(s) of additional Assignor(s)/inventor(s) attached. 1 1es 🖾 No

DC01/3306284.1

PATENT REEL: 049592 FRAME: 0558

RECORDED: 06/26/2019