505774275 11/14/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

Version v1.2

EPAS ID: PAT5821093

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MINORU NAKAGAWA	09/09/2019
YUKI NAKANO	09/04/2019
MASATOSHI AKETA	09/10/2019
MASAYA UENO	09/04/2019
SEIGO MORI	09/10/2019
KENJI YAMAMOTO	09/10/2019

RECEIVING PARTY DATA

Name:	ROHM CO., LTD.
Street Address:	21, SAIIN MIZOSAKI-CHO, UKYO-KU, KYOTO-SHI
City:	куото
State/Country:	JAPAN
Postal Code:	615-8585

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16613549

CORRESPONDENCE DATA

Fax Number: (972)628-3616

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: 9726283600

Email: IPDOCKETING@MUNCKWILSON.COM

Correspondent Name:BRIAN D. WALKERAddress Line 1:P.O. DRAWER 800889Address Line 4:DALLAS, TEXAS 75380

ATTORNEY DOCKET NUMBER:	ROHM61-34776
NAME OF SUBMITTER:	BRIAN D. WALKER
SIGNATURE: /BRIAN D. WALKER, REG. #37751/	
DATE SIGNED:	11/14/2019

Total Attachments: 6

PATENT REEL: 051012 FRAME: 0112

505774275

(For Use with Signed Application Data Sheet)

Title of Invention:	SEMICONDUCTOR DEVICE				
the attached app the application is	dentified by the attorney docket no, at	d title of invention given above; cation No. <u>PCT/JP2018/019137</u> , filed <u>May 17</u>			
	ASSIGNME	NT			
		tiency of which are hereby acknowledged, as a presents hereby sell and assign, unto:			
Name of Assignee:	ROHM CO., LTD.				
Address of Assignee:	21, Saiin Mizosaki-cho, Ukyo-ku, I	Cyoto-shi, Kyoto 615-8585, Japan			
and to the above-identi- continuations thereof, a application or for said i by said ASSIGNEE, its	fied invention and United States pate nd in and to any and all Letters Paten nvention, including any and all reiss successors, or assigns to the full enc granted as fully and entirely as wor	e United States, its territories, and possessions in nt application, including any and all divisions or t of the United States that may issue on any such ses or extensions thereof, to be held and enjoyed of the term or terms for which any and all such ald have been held and enjoyed by me had this			
	request the Director of the U.S. Paten SSIGNEE, its successors, or assigns in	t and Trademark Office to issue any and all such accordance herewith.			
		d right to sell and assign the interests herein sold xecute any document or instrument in conflict			
or assigns all informatic and deliver any papers, acts deemed necessary perfect title to said inve- all Letters Patent that m its successors, or assig	on known to me relating to said invermake all rightful oaths, testify in any or desirable by said ASSIGNEE, it intion, to said application including day be granted therefor or thereon, inc	ASSIGNEE, its successors, legal representatives, ation or patent application and that I will execute legal proceedings, and perform all other lawful successors, legal representatives, or assigns to visions and continuations thereof and to any and luding reissues or extensions, in said ASSIGNEE successors, legal representatives, or assigns in States for said invention.			
	<u>DECLARAT</u>	<u>ION</u>			
As a below-named inve	ntor, I hereby declare that:				
The above-identified ap	plication was made or authorized to b	e made by me.			
I believe that I am the o	riginal inventor or an original joint in	ventor of a claimed invention in the application.			
	hat any willful false statement made sonment of not more than five (5) yea	in this declaration is punishable under 18 U.S.C. s, or both.			
Signature:	linoru Nakagawa	Sep. 9, 2019			
Inventor:	Minoru NAKAGAWA	DATE			

(For Use with Signed Application Data Sheet)

Title of Invention:	SEMICONDUCTOR DEVICE	
the attached appl the application ic	claration are directed to (check one): lication; lentified by the attorney docket no. and title oplication or PCT International Application	
	ASSIGNMENT	
	consideration, the receipt and sufficiency have sold and assigned, and by these prese	
Name of Assignee:	ROHM CO., LTD.	
Address of Assignee:	21, Saiin Mizosaki-cho, Ukyo-ku, Kyoto-	-shi, Kyote 615-8585, Japan
and to the above-identitic continuations thereof, a application or for said i by said ASSIGNEE, its	i) all my right, title, and interest for the Unified invention and United States patent append in and to any and all Letters Patent of the nvention, including any and all reissues or successors, or assigns to the full end of the granted as fully and entirely as would hande.	dication, including any and all divisions of the United States that may issue on any suc- extensions thereof, to be held and enjoyed the term or terms for which any and all such
	request the Director of the U.S. Patent and SSIGNEE, its successors, or assigns in acco	
	that I have the full and unencumbered righ I have not executed and will not execut	
or assigns all informatic and deliver any papers, acts deemed necessary perfect title to said inve- all Letters Patent that m its successors, or assig	gree that I will communicate to said ASSIO in known to me relating to said invention of make all rightful oaths, testify in any legal or desirable by said ASSIGNEE, its succention, to said application including division ay be granted therefor or thereon, including ins, or to assist said ASSIGNEE, its succenforcing Letters Patent of the United State	or patent application and that I will execute proceedings, and perform all other lawful essors, legal representatives, or assigns to a sand continuations thereof and to any and reissues or extensions, in said ASSIGNEF essors, legal representatives, or assigns in
	DECLARATION	
As a below-named inves	ntor, I hereby declare that:	
The above-identified ap	plication was made or authorized to be mad	e by me.
I believe that I am the o	riginal inventor or an original joint inventor	of a claimed invention in the application.
	hat any willful false statement made in this conment of not more than five (5) years, or l	
Signature:	Jok! Nakano-	Sep. 4, 2019
Inventor:	Yuki NAKANO	DATE

(For Use with Signed Application Data Sheet)

Title of Invention:	SEMICONDUCTOR DEVICE				
the attached apple the application in	claration are directed to (check one): lication; dentified by the attorney docket no. and title of oplication or PCT International Application No	invention given above; b. PCT/JP2018/019137, filed May 17,			
	ASSIGNMENT				
	consideration, the receipt and sufficiency of have sold and assigned, and by these presents				
Name of Assignee:	ROHM CO., LTD.				
Address of Assignee:	21, Saiin Mizosaki-cho, Ukyo-ku, Kyoto-sh	i, Kyoto 615-8585, Japan			
and to the above-identized continuations thereof, a application or for said i by said ASSIGNEE, its	E) all my right, title, and interest for the United fied invention and United States patent applicand in and to any and all Letters Patent of the Univention, including any and all reissues or exaccessors, or assigns to the full end of the togranted as fully and entirely as would have ade.	ation, including any and all divisions or Inited States that may issue on any such tensions thereof, to be held and enjoyed erm or terms for which any and all such			
	request the Director of the U.S. Patent and Tra SSIGNEE, its successors, or assigns in accorda				
I warrant and covenant that I have the full and unencumbered right to sell and assign the interests herein sold and assigned and that I have not executed and will not execute any document or instrument in conflict herewith.					
or assigns all informatic and deliver any papers, acts deemed necessary perfect title to said inve- all Letters Patent that m its successors, or assig	agree that I will communicate to said ASSIGN on known to me relating to said invention or p make all rightful oaths, testify in any legal proof or desirable by said ASSIGNEE, its success ention, to said application including divisions at any be granted therefor or thereon, including regres, or to assist said ASSIGNEE, its success enforcing Letters Patent of the United States for	patent application and that I will execute roceedings, and perform all other lawful sors, legal representatives, or assigns to and continuations thereof and to any and dissues or extensions, in said ASSIGNEE, ors, legal representatives, or assigns in			
	DECLARATION				
As a below-named inve	ntor, I hereby declare that:				
The above-identified ap	pplication was made or authorized to be made b	by me.			
I believe that I am the o	riginal inventor or an original joint inventor of	a claimed invention in the application.			
	that any willful false statement made in this desonment of not more than five (5) years, or bot				
Signature:	Masatushi Aketa	Sep. 10. 2019			
Inventor:	Masatoshi AKETA	DATE			

(For Use with Signed Application Data Sheet)

Title of Invention:	SEMICONDUCTOR DEVICE	
the attached application in	claration are directed to (check one): lication; dentified by the attorney docket no. and title epplication or PCT International Application	
	ASSIGNMENT	
	consideration, the receipt and sufficiency have sold and assigned, and by these presen	
Name of Assignee:	ROHM CO., LTD.	
Address of Assignce:	21, Saiin Mizosaki-cho, Ukyo-ku, Kyoto-s	shî, Kyoto 615-8585, Japan
and to the above-identic continuations thereof, a application or for said i by said ASSIGNEE, its	E) all my right, title, and interest for the Unite fied invention and United States patent applind in and to any and all Letters Patent of the invention, including any and all reissues or a successors, or assigns to the full end of the granted as fully and entirely as would have ade.	ication, including any and all divisions of United States that may issue on any suclextensions thereof, to be held and enjoyed term or terms for which any and all sucl
	request the Director of the U.S. Patent and T SSIGNEE, its successors, or assigns in accor	
	that I have the full and unencumbered right I have not executed and will not execute	
or assigns all informatic and deliver any papers, acts deemed necessary perfect title to said inve- all Letters Patent that m its successors, or assig	agree that I will communicate to said ASSIG on known to me relating to said invention or make all rightful oaths, testify in any legal or desirable by said ASSIGNEE, its succession, to said application including divisions any be granted therefor or thereon, including ms, or to assist said ASSIGNEE, its successioned agreement of the United States	patent application and that I will execute proceedings, and perform all other lawfu ssors, legal representatives, or assigns to and continuations thereof and to any and reissues or extensions, in said ASSIGNES ssors, legal representatives, or assigns in
	DECLARATION	
As a below-named inve	ntor, I hereby declare that:	
The above-identified ap	plication was made or authorized to be made	by me.
I believe that I am the o	riginal inventor or an original joint inventor	of a claimed invention in the application.
· · · · · · · · · · · · · · · · · · ·	hat any willful false statement made in this sonment of not more than five (5) years, or be	
Signature:	UENO, Masoza	Sep. 4,2019
Inventor:	Masaya UENÓ	DATE

(For Use with Signed Application Data Sheet)

Title of Invention:	SEMICONDUCTOR DEVICE				
the attached appl the application ic	dentified by the attorney docket no. at	nd title of invention given above; leation No. <u>PCT/JP2018/019137</u> , filed <u>May 17.</u>			
	ASSIGNME	NT			
		ciency of which are hereby acknowledged, as a presents hereby sell and assign, unto:			
Name of Assignee:	ROHM CO., LTD.				
Address of Assignee:	21, Saiin Mizosaki-cho, Ukyo-ku, I	Kyoto-shi, Kyoto 615-8585, Japan			
(hereinafter ASSIGNEE) all my right, title, and interest for the United States, its territories, and possessions in and to the above-identified invention and United States patent application, including any and all divisions or continuations thereof, and in and to any and all Letters Patent of the United States that may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, or assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by me had this Assignment not been made.					
	request the Director of the U.S. Pater SSIGNEE, its successors, or assigns i	at and Trademark Office to issue any and all such a accordance herewith.			
		d right to sell and assign the interests herein sold execute any document or instrument in conflict			
or assigns all informatic and deliver any papers, acts deemed necessary perfect title to said inve- all Letters Patent that m its successors, or assig-	on known to me relating to said inve- make all rightful oaths, testify in an or desirable by said ASSIGNEE, it ntion, to said application including d ay be granted therefor or thereon, inc	ASSIGNEE, its successors, legal representatives, ntion or patent application and that I will execute y legal proceedings, and perform all other lawful s successors, legal representatives, or assigns to ivisions and continuations thereof and to any and sluding reissues or extensions, in said ASSIGNEE, a successors, legal representatives, or assigns in I States for said invention.			
	DECLARAT	<u>ION</u>			
As a below-named inves	ntor, I hereby declare that:				
The above-identified ap	plication was made or authorized to b	ne made by me.			
I believe that I am the o	riginal inventor or an original joint in	ventor of a claimed invention in the application.			
· · · · · · · · · · · · · · · · · · ·	hat any willful false statement made sonment of not more than five (5) yea	in this declaration is punishable under 18 U.S.C. rs. or both.			
Signature:	Seigo Mori	Sep. 10, 2019			
Inventor:	Seigo MORI	DATE			

RECORDED: 11/14/2019

ASSIGNMENT AND DECLARATION UNDER 37 C.F.R. § 1.63

(For Use with Signed Application Data Sheet)

Title of Invention:	SEMICONDUCTOR DEVICE				
This assignment and decline the attached application is application is United States April 2018.	lication; ientified by the atto	omey docket no, and title of	invention given above; b. <u>PCT/JP2018/019137</u> , filed <u>May 17</u>		
		ASSIGNMENT			
			which are hereby acknowledged, as hereby sell and assign, unto:		
Name of Assignee:	ROHM CO., LTI	D.			
Address of Assignee:	21, Saiin Mizosal	ci-cho, Ukyo-kn, Kyoto-sh	i, Kyoto 615-8585, Japan		
and to the above-identitic continuations thereof, a application or for said i by said ASSIGNEE, its	fied invention and nd in and to any an nvention, including successors, or assi granted as fully ar	United States patent applic and all Letters Patent of the U g any and all reissues or ex igns to the full end of the to	States, its territories, and possessions in ation, including any and all divisions of Juited States that may issue on any such tensions thereof, to be held and enjoyed from or terms for which any and all such been held and enjoyed by me had thi		
		r of the U.S. Patent and Tra essors, or assigns in accorda	demark Office to issue any and all suclance herewith.		
			sell and assign the interests herein solony document or instrument in conflic		
or assigns all informatic and deliver any papers, acts deemed necessary perfect title to said inve- all Letters Patent that m its successors, or assig	on known to me re make all rightful of or desirable by sa- ution, to said appli- ay be granted there as, or to assist sai	lating to said invention or poaths, testify in any legal proid ASSIGNEE, its successication including divisions arefor or thereon, including te	EE, its successors, legal representatives patent application and that I will execut receedings, and perform all other lawfulors, legal representatives, or assigns to and continuations thereof and to any anissues or extensions, in said ASSIGNET ors, legal representatives, or assigns in read invention.		
		DECLARATION			
As a below-named inve	ntor, Thereby decla	ire that:			
The above-identified ap	plication was made	e or authorized to be made b	y me.		
I believe that I am the o	riginal inventor or	an original joint inventor of	a claimed invention in the application.		
		se statement made in this do re than five (5) years, or bot	eclaration is punishable under 18 U.S.C h.		
Signature:	Konji Y	amanoto'	Sep. 10, 2019		
Inventor:	Qr G	ji YAMAMOTO	DATE		