504900556 05/04/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4947300

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHIGEAKI SAITO	12/26/2017
YOSHITO NAKAZAWA	12/26/2017
HITOSHI MATSUURA	12/26/2017
YUKIO TAKAHASHI	12/26/2017

RECEIVING PARTY DATA

Name:	RENESAS ELECTRONICS CORPORATION
Street Address:	2-24, TOYOSU 3-CHOME, KOUTOU-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	135-0061

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15971139

CORRESPONDENCE DATA

Fax Number: (202)293-7860

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: 2022937060

Email: tmontgomery@sughrue.com, sughrue@sughrue.com

Correspondent Name:

2100 PENNSYLVANIA AVENUE NW Address Line 1:

Address Line 4: WASHINGTON, D.C. 20037

ATTORNEY DOCKET NUMBER:	Q239209	
NAME OF SUBMITTER:	TANIKA MONTGOMERY	
SIGNATURE:	/Tanika Montgomery/	
DATE SIGNED:	05/04/2018	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 2

source=Q239209DeclarationandAssignment#page1.tif

PATENT REEL: 045719 FRAME: 0185

504900556

source = Q239209 Declaration and Assignment #page 2.tif

PATENT REEL: 045719 FRAME: 0186

ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below; and

Whereas, Renesas Electronics Corporation of 2-24, Toyosu 3-chome, Koutou-ku, Tokyo 135-0061, Japan, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged.

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including all divisions, and continuations thereof, and all Letters Patent of the United States that may be granted thereon, and all reissues thereof, including the right to claim priority under 35 USC 119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further

consideration all papers deemed ne the assignee.	cessary by the assignee in connection with the United States application when called upon t	n do sa by
(Legalization not required for record	sing but is prima facie evidence of execution under 35 USC 261)	
As the below named inventor, I hen	sby declare that:	
This assignment with declaration is directed to:	The attached application, or	
	United States Application or PCT International Application Number	
	filed on	
The application is entitled:		
	SEMICONDUCTOR DEVICE	
The above identified application wa	s made or was authorized to be made by me.	
I believe that I am the original inver	ntor or an original joint inventor of a claimed invention in the application.	
I have reviewed and understand the	contents of the application for which this assignment with declaration is being submitted.	
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 CFR	1,56.
I hereby acknowledge that any willf or imprisonment of not more than t	ul false statement made in this assignment with declaration is punishable under 18 USC 100 ive (5) years, or both.	1 by fine
Authorization To Permit Access T	o Application by Participating Office	
(JPO), the Korean Intellectual Prop property offices in which a foreign patent application, See 37 CFR 1.1	reby grants the USPTO authority to provide the European Patent Office (EPO), the Japan P serty Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual application claiming priority to the above-identified application is filed access to the above-identified application is filed access to the above-identified application is filed to have which a foreign application claiming priority to the above-identified application is filed to have	dentified IPO, or
identified patent application-as-file	(3), access will be provided to a copy of the application—as-filed with respect to: 1) the above id, 2) any foreign application to which the above—identified application claims priority under 3 application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the	5 USC

identified patent application, and 3) any U.S. application-as-filed from which benefit is sought in the above-identified patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Office.

> **PATENT REEL: 045719 FRAME: 0187**

Legal Name of Inventor	Shigeaki SALIO	······································	
Inventor's Signature	Shigea	hi Saito	Dato <u>December 26, 2017</u>
Legal Name of Additional	Inventor, If Any	Yoshito NAKAZAWA	
Inventor's Signature	Yoshito	Nakazawa	Date December 26, 2017
Legal Name of Additional	Inventor, If Any	Hitoshi MATSUURA	
Inventor's Signature	<u>Hitoshi</u>	Matsuura	Bata December 26, 2017
Legal Name of Additional		Yukio TAKAHASHI	
Inventor's Signature	Jukio_	<u>Takahoshi</u>	Date December 26, 2017