PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KIYOSHI HAYASE	10/20/2020
SHINICHI SHIBAHARA	10/29/2020
YUKI HAYAKAWA	10/13/2020
YOICHI YUYAMA	10/14/2020

RECEIVING PARTY DATA

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State/Country:	JAPAN	
Postal Code:	135-0061	

PROPERTY NUMBERS Total: 1

Property Type	Number		
Application Number:	17494630		

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	067237-1997
NAME OF SUBMITTER:	TOMOKI TANIDA
SIGNATURE:	/Tomoki Tanida/
DATE SIGNED:	10/05/2021

Total Attachments: 4

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PATENT REEL: 057707 FRAME: 0664 506907039

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> PATENT REEL: 057707 FRAME: 0665

Docket No.: Only After Sept 16, 2012

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 necessary by the assignee in connection with the United States application when called upon to do so by

the assignee.					
(Legalization not required for recording	g but is	prima facie evidence of execution under 35 USC 261)			
As the below named inventor, I hereby	declare	e that:			
This assignment with declaration is directed to:		The attached application, or			
	\boxtimes	United States Application or PCT International Application Number 16/859,463			
		filed on April 27, 2020.			
The application is entitled:					
	SEMIC	ONDUCTOR DEVICE AND SYSTEM USING THE SAME			
The above identified application was m	ade or	was authorized to be made by me.			
I believe that I am the original inventor	orano	original joint inventor of a claimed invention in the application.			
I have reviewed and understand the co	ntents	of the application for which this assignment with declaration is being submitted.			
I am aware of the duty to disclose to t	he Offic	e all information known to me to be material to patentability as defined in 37 CFR 1.56.			
I hereby acknowledge that any willful for imprisonment of not more than five		tement made in this assignment with declaration is punishable under 18 USC 1001 by fine rs, or both.			
Authorization To Permit Access To Ap	plicatio	n by Participating Office			
(JPO), the Korean Intellectual Property property offices in which a foreign app patent application. See 37 CFR 1.14(c)	y Office lication and (h)	the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual claiming priority to the above-identified application is filed access to the above-identified applicant does not wish the EPO, JPO, KIPO, or reign application claiming priority to the above-identified application is filed to have			
n accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the application—as—filed with respect to: 1) the above—dentified patent application—as—filed, 2) any foreign application to which the above—identified application claims priority under 35 USC 19(a)—(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above—					

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.

R191115-US

Legal Name of Inventor	DocuSigned by:	***************************************	
Inventor's Signature	/Kiyoshi HAYA	SE/ Date	10/20/2020
Legal Name of Additional	Inventor, If Any Shinichi SI	HIBAHARA	
Inventor's Signature		Date	
Legal Name of Additional	Inventor, If Any Yuki HAYA	\KAWA	
Inventor's Signature		A/ Date	10/13/2020
Legal Name of Additional	Inventor, If Any Yaichi YU\	/AMA	
Inventor's Signature	/Yoichi YUYAM	A/ Date	10/14/2020

Docket No.: Only After Sept 16, 2012

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 necessary by the assignee in connection with the United States application when called upon to do so by the assignee.

	the assignee.				
(Legalization not required for recording but is prima facie evidence of execution under 35 USC 261)					
	As the below named inventor, I hereby declare that:				
	This assignment with declaration is The attached application, or directed to:				
	United States Application or PCT International Application Number 16/859,463				
	filed on <u>April 27, 2020</u> .				
	The application is entitled:				
	SEMICONDUCTOR DEVICE AND SYSTEM USING THE SAME				
	The above identified application was made or was authorized to be made by me.				
	I believe that I am the original inventor 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 willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.				
	Authorization To Permit Access To Application by Participating Office				
	If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.				
	In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the application—as—filed with respect to: 1) the above—identified patent application—as—filed, 2) any foreign application to which the above—identified application claims priority under 35 USC 119(a)—(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above—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.

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Legal Name of Inventor	Kiyoshi HAYASi	- -		**********************************	(PARAPEREE
Inventor's Signature		Control of the Contro	Date		leidheannanna a
Legal Name of Additional Ir	nventor, If Any DocuSigned	***************************************	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		. October 1985 in the second seco
Inventor's Signature		ii SHBAHARA/	Date	10/29/2020	~
Legal Name of Additional Ir	nventor, If Any	Yuki HAYAKAWA	***************************************		
Inventor's Signature	ACTIVITY OF THE PROPERTY OF TH		Date		MARARARAN
Legal Name of Additional In	ventor, If Any	Yolchi YUYAMA			(Michigan page)
Inventor's Signature			Data		

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