# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3511132

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
TOMOKI YASUKAWA	05/07/2015
AKIRA OIZUMI	04/26/2015
TOYOHIKO YOSHIDA	04/28/2015
YOSHINORI TOKIOKA	04/30/2015

# **RECEIVING PARTY DATA**

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

# **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14843823

# **CORRESPONDENCE DATA**

Fax Number: (202)756-8087

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.

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Address Line 2: 500 NORTH CAPITOL STREET, N.W.

Address Line 4: WASHINGTON, D.C. 20001

ATTORNEY DOCKET NUMBER:	067237-0926
NAME OF SUBMITTER:	TOMOKI TANIDA
SIGNATURE:	/TOMOKI TANIDA/
DATE SIGNED:	09/02/2015
	This document serves as an Oath/Declaration (37 CFR 1.63).

**PATENT** REEL: 036482 FRAME: 0544

503464507

# Total Attachments: 8 source=DECLARATIONANDASSIGNMENT#page1.tif source=DECLARATIONANDASSIGNMENT#page2.tif source=DECLARATIONANDASSIGNMENT#page3.tif source=DECLARATIONANDASSIGNMENT#page4.tif source=DECLARATIONANDASSIGNMENT#page5.tif source=DECLARATIONANDASSIGNMENT#page6.tif source=DECLARATIONANDASSIGNMENT#page7.tif source=DECLARATIONANDASSIGNMENT#page7.tif

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 Kanagawa, 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.

	n the application to the assignee, its successors and assigns; and I/we will execute without further ssary by the assignee in connection with the United States application when called upon to do so by
(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 that:
This assignment with declaration is directed to:	X The attached application, or
	United States Application or PCT International Application Number
	filed on
The application is entitled:	
	SEMICONDUCTOR DEVICE
The above identified application was m	nade 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 co	ontents of the application for which this assignment with declaration is being submitted.
I am aware of the duty to disclose to t	he Office 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	alse statement made in this assignment with declaration is punishable under 18 USC 1001 by fine (5) years, or both.
Authorization To Permit Access To A	opplication by Participating Office
(JPO), the Korean Intellectual Property property offices in which a foreign applipatent application. See 37 CFR 1.14(c)	y grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office y Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual lication claiming priority to the above-identified application is filed access to the above-identified and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or ich a foreign application claiming priority to the above-identified application is filed to have
identified patent application—as-filed, 2 119(a)-(d) if a copy of the foreign appli	access will be provided to a copy of the application—as—filed with respect to: 1) the above— 2) any foreign application to which the above—identified application claims priority under 35 USC ication that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above—by 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.

Legal Name of Inventor	TOMORE TASURAY	YVA	~	
Inventor's Signature	Tomoki	i Yasukawa	Date Mary	7,2015
Legal Name of Additional In	nventor, If Any	Akira OIZUMI		
Inventor's Signature			Date	
Legal Name of Additional In	ventor, If Any	Toyohiko YOSHIDA		
Inventor's Signature			Date	
Legal Name of Additional In	iventor, If Any	Yoshinori TOKIOKA		
Inventor's Signature			Date	

Docket No.: Only After Sept 16, 2012

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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	, 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:	X	The attached application, or
		United States Application or PCT International Application Number
		filed on
The application is entitled:		
		SEMICONDUCTOR DEVICE
The above identified application was m	ade or	was authorized to be made by me.
I believe that I am the original inventor	oran	original joint inventor of a claimed invention in the application.
I have reviewed and understand the co	ontents	of the application for which this assignment with declaration is being submitted.
I am aware of the duty to disclose to t	he Offic	ce all information known to me to be material to patentability as defined in 37 CFR 1.56.
I hereby acknowledge that any willful f or imprisonment of not more than five		stement made in this assignment with declaration is punishable under 18 USC 1001 by fine rs, or both.
Authorization To Permit Access To A	pplicat	ion by Participating Office
(JPO), the Korean Intellectual Propert property offices in which a foreign app patent application. See 37 CFR 1.14(c)	y Office lication and (h	s 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 ). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or
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-

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.

Legal Name of Inventor Tomok: TASUK	AWA	
Inventor's Signature		Date
Legal Name of Additional Inventor, If Any	Akira OIZUMI	
Inventor's Signature Alcira	Oiz umi	Date April 26, 2015
Legal Name of Additional Inventor, If Any	Toyohiko YOSHIDA	
Inventor's Signature		Date
Legal Name of Additional Inventor, If Any	Yeshinori TOKIOKA	
Inventor's Signature		Date

Docket No.: Only After Sept 16, 2012

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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.

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The application is entitled:		
		SEMICONDUCTOR DEVICE
The above identified application was m	ade or	was authorized to be made by me.
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I have reviewed and understand the co	ntents	of the application for which this assignment with declaration is being submitted.
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In accordance with 37 CFR 1.14(h)(3), identified patent application-as-filed, 2	access () any fo	will be provided to a copy of the application—as—filed with respect to: 1) the above— preign application to which the above—identified application claims priority under 35 USC

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.

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.

Legal Name of Inventor Lomoki YASU	KAWA		
Inventor's Signature		Date	
Legal Name of Additional Inventor, If Any	Akira OIZUMI		
Inventor's Signature		Date	
Legal Name of Additional Inventor, If Any	Toyohiko YOSHIDA		
Inventor's Signature 390h	ko Joshidu	Date	April 28, 2015
Legal Name of Additional Inventor, If Any	Yoshinori TOKIOKA		
Inventor's Signature		Date	

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(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 |X| The attached application, or directed to: United States Application or PCT International Application Number filed on The application is entitled: SEMICONDUCTOR DEVICE 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 aboveidentified 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-

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Legal Name of Inventor Tomoki 1A30N	4.44	
Inventor's Signature	······································	Date
Legal Name of Additional Inventor, If Any	Akira OIZUMI	
Inventor's Signature		Date
Legal Name of Additional Inventor, If Any	Toyohiko YOSHIDA	
Inventor's Signature		Date
Legal Name of Additional Inventor, If Any	Yoshinori TOKIOKA	
Inventor's Signature AMMMA	7i Lkirka	note April 30, 2015

Page 2 of 2