505634143 08/22/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHUNSUKE OKUMURA	04/05/2019

RECEIVING PARTY DATA

Name:	RENESAS ELECTRONICS CORPORATION
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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16545570

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ATTORNEY DOCKET NUMBER:	067237-1594
NAME OF SUBMITTER:	RENELL FEIMSTER FOR TOMOKI TANIDA
SIGNATURE:	/Renell Feimster for Tomoki Tanida/
DATE SIGNED:	08/22/2019

Total Attachments: 2

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> **PATENT REEL: 050129 FRAME: 0575** 505634143

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	but is	prima facie evidence of execution under 35 USC 261)
As the below named inventor, I hereby	declar	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:		
MULTIPLY-ACCUMULATE C	PERA	TION DEVICE, MULTIPLY-ACCUMULATE OPERATION METHODS, AND SYSTEMS
The above identified application was m	ade or	was authorized to be made by me.
I believe that I am the original inventor	or an o	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 Offi	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 reign application claiming priority to the above-identified application is filed to have
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 aboveidentified 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.

> R180225 REEL: 050129 FRAME: 0576

Legal Name of Inventor

Shunsuke OKUMURA

Inventor's Signature

Shunzuke Okumira

Date April 5, 2019

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PATENT R180225

REEL: 050129 FRAME: 0577

RECORDED: 08/22/2019