

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JAMES RUSSELL WEBSTER	08/13/2019
IAN ROBERT HARMON	08/13/2019
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<b>Postal Code:</b>	27409
<b>PROPERTY NUMBERS Total: 2</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16503720
<b>PCT Number:</b>	US2019040667
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<b>NAME OF SUBMITTER:</b>	ANNA M. NELSON
<b>SIGNATURE:</b>	/Anna M. Nelson/
<b>DATE SIGNED:</b>	08/27/2019
<b>Total Attachments: 2</b>	
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## ASSIGNMENT

Whereas We, **James Russell Webster** and **Ian Robert Harmon**, with residences and citizenships as indicated below; have made an invention in

### **BULK ACOUSTIC WAVE RESONATOR WITH INCREASED DYNAMIC RANGE**

Filed: July 5, 2019

U.S. Application No.: 16/503,720

and executed an application for Letters Patent of the United States of America based thereon

and

### **BULK ACOUSTIC WAVE RESONATOR WITH INCREASED DYNAMIC RANGE**

Filed: July 5, 2019

PCT Application No.: PCT/US2019/040667

as described in the above-identified patent application filed under the Patent Cooperation Treaty, and both of which claim priority to and/or the benefit of the following application:

### **MEANS FOR ENHANCING DYNAMIC RANGE OF BAW BASED IMMUNOASSAY**

Filed: July 6, 2018

U.S. Provisional Application No.: 62/694,511

and executed an application for Letters Patent of the United States of America based thereon.

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, we have individually and jointly agreed to assign and transfer and do hereby assign and transfer unto **QORVO US, INC.** ("Assignee"), a corporation of **North Carolina**, having its principal office at **7628 Thorndike Road, Greensboro, North Carolina 27409**, its successors and assigns, our entire right, title, and interest in and to said invention and applications, and in and to any division or continuation (in whole or in part) of said applications, and in and to any and all improvements in said invention made by us or any of us or made jointly with others (provided any such improvement is made during, or within one year after the termination of, the employment by the Assignee of whichever of us, solely or jointly with one or more others, has made the same), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further applications based in whole or in part upon said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by us or any of us had this assignment and transfer not been made;

We do further agree for ourselves and for our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as we lawfully may, that may be deemed necessary by the Assignee, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

Assignment to **QORVO US, Inc.**

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Application No. 16/503,720 & PCT/US2019/040667

Filing Date: July 5, 2019

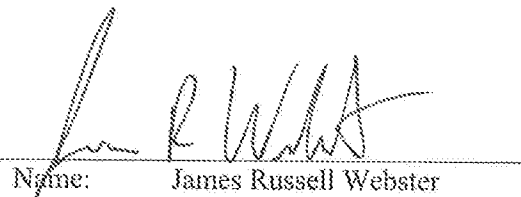
For: BULK ACOUSTIC WAVE RESONATOR WITH INCREASED DYNAMIC RANGE

And we do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent that may be granted upon any of said applications, to **QORVO US, INC.** as the assignee of the entire right, title, and interest therein.

Further, we covenant and agree with the Assignee, and its successors and assigns, that we have not assigned, granted, mortgaged, licensed, or executed any other agreement affecting the rights and property herein conveyed to others and that we possess the full right to convey these rights and property as herein expressed.

If the filing date and application numbers are not identified in this Assignment at the time of execution, we authorize the Assignee and its agents, legal representatives, successors and assigns, to insert such information into this Assignment and/or true and correct copies thereof at a later date.

In witness whereof, we have hereunto signed our names on the days and years set forth below.

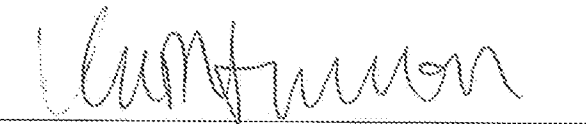


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8/13/2019  
Date



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8/13/2019  
Date