

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
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EPAS ID: PAT5566285

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
DERYA DENIZ	05/13/2019
ROBERT KRAFT	06/04/2019
JOHN BELSICK	05/20/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	QORVO US, INC.
<b>Street Address:</b>	7628 THORNDIKE ROAD
<b>City:</b>	GREENSBORO
<b>State/Country:</b>	NORTH CAROLINA
<b>Postal Code:</b>	27409
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16359632
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(612)305-1228
<i>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.</i>	
<b>Phone:</b>	6123051220
<b>Email:</b>	cberling@mrgiplaw.com
<b>Correspondent Name:</b>	MUETING, RAASCH & GEBHARDT, P.A.
<b>Address Line 1:</b>	111 THIRD AVENUE SOUTH - SUITE 350
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55401
<b>ATTORNEY DOCKET NUMBER:</b>	0468.017320US12
<b>NAME OF SUBMITTER:</b>	LOTTA KIURU-RIBAR
<b>SIGNATURE:</b>	/Lotta Kiuru-Ribar/
<b>DATE SIGNED:</b>	06/11/2019
<b>Total Attachments: 3</b>	
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**ASSIGNMENT**

Whereas We, **Derya Deniz, Robert Kraft, and John Belsick**, with residences and citizenships as indicated below; have made an invention in

**PIEZOELECTRIC BULK LAYERS WITH TILTED C-AXIS ORIENTATION AND METHODS FOR MAKING THE SAME**

Filed: March 20, 2019

U.S. Patent Application No.: 16/359,632

and executed an application for Letters Patent of the United States of America based thereon and that claims priority to and/or the benefit of the following applications:

**PIEZOELECTRIC BULK LAYERS WITH TILTED C-AXIS ORIENTATION AND METHODS FOR MAKING THE SAME**

Filed: March 21, 2018

U.S. Provisional Application No.: 62/646,208

Filed: March 21, 2018

U.S. Provisional Application No.: 62/646,213

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 application, and in and to any division or continuation (in whole or in part) of said application, 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 application 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;

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.

Assignment to QORVO US, Inc.

Page 2 of 2

Application No. 16/359,632

Filing Date: March 20, 2019

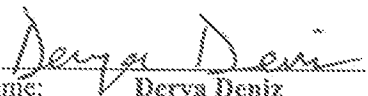
For: PIEZOELECTRIC BULK LAYERS WITH TILTED C-AXIS ORIENTATION AND METHODS FOR MAKING THE SAME

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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 number 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.

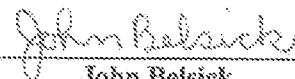
In witness whereof, we have hereunto signed our names on the days and years set forth below.

  
Name: Derya Deniz  
Residence: 9832 Beaver Dam Lane  
McKinney, Texas 75071  
Citizenship: US

05/13/2019  
Date

Name: Robert Kraft  
Residence: 8400 Beaton Court  
Plano, Texas 75025  
Citizenship: US

Date

  
Name: John Belsick  
Residence: 2653 NW Rainbow Ridge Drive  
Bend, Oregon 97703  
Citizenship: US

05-20-19  
Date

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For: **PIEZOELECTRIC BULK LAYERS WITH TILTED C-AXIS ORIENTATION AND METHODS FOR MAKING THE SAME**

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Name: **Derya Deniz**  
Residence: 9832 Beaver Dam Lane  
McKinney, Texas 75071  
Citizenship: US

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Date



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Name: **Robert Kraft**  
Residence: 8400 Beaton Court  
Plano, Texas 75023  
Citizenship: US

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6/4/19  
Date

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Name: **John Belsick**  
Residence: 2653 NW Rainbow Ridge Drive  
Bend, Oregon 97703  
Citizenship: US

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Date