# 505426780 04/15/2019

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5473580

SUBMISSION TYPE:		NEW ASSIGNMENT			
ATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT		
CONVEYING PARTY	DATA				
		Name	Execution Date		
JOHN AUGUST ORLOWSKI 04/12/2019			04/12/2019		
STEPHEN CRAIG PARKER 04/12/2019		04/12/2019			
JAMES EDWIN CULL	.ER JR.		04/12/2019		
RECEIVING PARTY	ΟΑΤΑ				
Name:	QORVO	D US, INC.			
Street Address:	7628 TI	ORNDIKE ROAD			
City:	GREEN	ISBORO			
State/Country:	NORTH	I CAROLINA			
Postal Code:	27409				
Application Number:		16383752			
PROPERTY NUMBERS Total: 1 Property Type		Number	7		
		10503732			
CORRESPONDENCE	E DATA				
Fax Number:		(877)812-1249			
		the e-mail address first; if that is un ; if that is unsuccessful, it will be se			
Phone:	•	9192382300			
Email:		sbaker@wt-ip.com			
Correspondent Name: QORVO AND WITHROW + TERRANOVA					
		106 PINEDALE SPRINGS WAY			
Address Line 4:		CARY, NORTH CAROLINA 27511			
ATTORNEY DOCKET	NUMBER:	2867-2439			
NAME OF SUBMITTER:		SARAH BAKER	SARAH BAKER		
SIGNATURE:		/Sarah Baker/	/Sarah Baker/		
DATE SIGNED:		04/15/2019			
Total Attachments: 6					
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## DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE Title of FIDUCIALS FOR LAMINATE STRUCTURES Invention As the below named inventor, I hereby declare that: This declaration is directed to: X The attached application; or United States application or PCT international application number, filed on. The above-identified application is made or 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 hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. WHEREAS, <u>Oorvo US, Inc.</u>, a corporation duly organized and existing under the laws of the state of Delaware and having a principal place of business at 7628 Thorndike Road, Greensboro, North Carolina, 27409 (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the entire right, title, and interest in and to said invention as described in the specification executed by me concurrently herewith, and any and all Letters Patent which shall be granted therefor. NOW, THEREFORE, To All Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the said assignor, have sold, assigned, transferred and set over unto the said ASSIGNEE, its successors and assigns, the entire right, title and interest in and to the above-mentioned application and invention and in and to any and all Letters Patent of the United States which may hereafter be granted therefor, and in any and to any and all continuations. continuations-in-part, substitutions, divisions or reissues of said Letters Patent, the same to be held and enjoyed by the said ASSIGNEE, for its interest, and for its own use and behalf, and the use and behalf of its successors and assigns, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made. I, the said assignor, transfer and set over unto the said ASSIGNEE the rights to the priority application, namely U.S. provisional application 62/815,375 filed on 3/08/2019. And for the consideration aforesaid, I hereby covenant and agree to and with the said ASSIGNEE, its successors and assigns, that at the time of the execution and delivery of these presents I am a joint and lawful owner of the entire right, title and interest in and to the invention, application and Letters Patent above-mentioned and that the same are unencumbered, and that I have good right and lawful authority to sell and convey the same in the manner herein set forth. And for the consideration aforesaid, I hereby covenant and agree to and with the said ASSIGNEE, its successors and assigns, that I will, whenever its counsel or the counsel of its successors and assigns, learned in the law, shall advise that an amendment, division, continuation, continuation-in-part, or 1

substitution of, or any other proceeding in connection with said application, including interference proceedings, is lawful and desirable, sign all papers and drawings, take all rightful oaths, and do all acts necessary or required to be done for the procurement of valid Letters Patent for said invention, or for the reissue of the same without charge to the said ASSIGNEE, its successors or assigns, but at its or their expense.

I hereby request the Commissioner for Patents to issue the Letters Patent in accordance with this instrument.

For the consideration aforesaid, I have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, assigns or nominee, the entire right, title and interest in and to any and all Letters Patent for said invention which may be granted in countries foreign to the United States and in and to any applications for Letters Patent which may be filed for said invention in countries foreign to the United States and in and to the invention described in said application; and I hereby authorize and empower the said ASSIGNEE, its successors, assigns or nominees to apply for Letters Patent or other form of protection on said invention in its own name or in the name of its successor, assignce, or nominee, in any and all countries where it may desire to file such application and where said application may be filed by another than the inventor; and I hereby covenant and agree to sign all papers and drawings, take all rightful oaths, and do all acts necessary or required to be done for procurement of Letters Patent, or other form of protection, for said invention or inventions in countries foreign to the United States, and for further investing or confirming the right and title therein to the ASSIGNEE, its successors, assignee, or nominee, without charge to the said ASSIGNEE, its successor, assignee or nominee, but at its or their expense.

IN WITNESS WHEREOF, I hereunto set my hand and seal.

#### LEGAL NAME OF INVENTOR

mventor: John August Orlowski Date: <u>4/12/19</u> Signature: Jah August Ochile-

## DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of	FIDUCIALS FOR LAMINATE STRUCTURES		
Invention As the below name	d inventor, I hereby declare that:		
This declaration is			
The above-identifie	ed application is made or authorized to be made by me.		
I believe that I am t application.	he original inventor or an original joint inventor of a claimed invention in the		
	lge that any willful false statement made in this declaration is punishable under 18 e or imprisonment of not more than five (5) years, or both.		
WHEREAS, <u>Qorvo US</u> , Inc., a corporation duly organized and existing under the laws of the state of Delaware and having a principal place of business at 7628 Thorndike Road, Greensboro, North Carolina, 27409 (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the entire right, title, and interest in and to said invention as described in the specification executed by me concurrently herewith, and any and all Letters Patent which shall be granted therefor.			
consideration, the r sold, assigned, tran- right, title and inter all Letters Patent of and all continuation the same to be held and the use and beh Patent may be gran	RE, To All Whom It May Concern, be it known that for good and valuable eccipt and sufficiency of which is hereby acknowledged, I, the said assignor, have sferred and set over unto the said ASSIGNEE, its successors and assigns, the entire est in and to the above-mentioned application and invention and in and to any and the United States which may hereafter be granted therefor, and in any and to any is, continuations-in-part, substitutions, divisions or reissues of said Letters Patent, and enjoyed by the said ASSIGNEE, for its interest, and for its own use and behalf, alf of its successors and assigns, to the full end of the term for which said Letters ted as fully and entirely as the same would have been held and enjoyed by me had sale not been made.		
	transfer and set over unto the said ASSIGNEE the rights to the priority application, ional application 62/815,375 filed on 3/08/2019.		
successors and assi- lawful owner of the above-mentioned at	ration aforesaid, I hereby covenant and agree to and with the said ASSIGNEE, its gns, that at the time of the execution and delivery of these presents I am a joint and entire right, title and interest in and to the invention, application and Letters Patent and that the same are unencumbered, and that I have good right and lawful authority he same in the manner herein set forth.		
successors and assig	ration aforesaid, I hereby covenant and agree to and with the said ASSIGNEE, its gns, that I will, whenever its counsel or the counsel of its successors and assigns, shall advise that an amendment, division, continuation, continuation-in-part, or		

## PATENT REEL: 048880 FRAME: 0652

substitution of, or any other proceeding in connection with said application, including interference proceedings, is lawful and desirable, sign all papers and drawings, take all rightful oaths, and do all acts necessary or required to be done for the procurement of valid Letters Patent for said invention, or for the reissue of the same without charge to the said ASSIGNEE, its successors or assigns, but at its or their expense.

I hereby request the Commissioner for Patents to issue the Letters Patent in accordance with this instrument.

For the consideration aforesaid, I have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, assigns or nominee, the entire right, title and interest in and to any and all Letters Patent for said invention which may be granted in countries foreign to the United States and in and to any applications for Letters Patent which may be filed for said invention in countries foreign to the United States and in and to the invention described in said application; and I hereby authorize and empower the said ASSIGNEE, its successors, assigns or nominees to apply for Letters Patent or other form of protection on said invention in its own name or in the name of its successor, assignee, or nominee, in any and all countries where it may desire to file such application and where said application may be filed by another than the inventor; and I hereby covenant and agree to sign all papers and drawings, take all rightful oaths, and do all acts necessary or required to be done for procurement of Letters Patent, or other form of protection, for said invention for said inventions in countries foreign to the United States, and for further investing or confirming the right and title therein to the ASSIGNEE, its successors, assignee, or nominee, without charge to the said ASSIGNEE, its successor, assignee or nominee, but at its or their expense.

IN WITNESS WHEREOF, I hereunto set my hand and seal.

#### LEGAL NAME OF INVENTOR

Date: 4-12-19 Inventor: James Edwin Culler, Jr. Signature: (

## PATENT REEL: 048880 FRAME: 0653

# DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of Invention	FIDUCIALS FOR LAMINATE STRUCTURES			
As the below named inventor, I hereby declare that:				
This declaration is o	lirected to: The attached application; or United States application or PCT international application number , filed on .			
The above-identified application is made or authorized to be made by me.				
I believe that I am t application.	he original inventor or an original joint inventor of a claimed invention in the			
	ge that any willful false statement made in this declaration is punishable under 18 or imprisonment of not more than five (5) years, or both.			
WHEREAS, <u>Qorvo US, Inc.</u> , a corporation duly organized and existing under the laws of the state of Delaware and having a principal place of business at 7628 Thorndike Road, Greensboro, North Carolina, 27409 (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the entire right, title, and interest in and to said invention as described in the specification executed by me concurrently herewith, and any and all Letters Patent which shall be granted therefor.				
consideration, the re- sold, assigned, trans- right, title and inter- all Letters Patent of and all continuation the same to be held and the use and beh Patent may be grant	E, To All Whom It May Concern, be it known that for good and valuable accept and sufficiency of which is hereby acknowledged, I, the said assignor, have ferred and set over unto the said ASSIGNEE, its successors and assigns, the entire est in and to the above-mentioned application and invention and in and to any and the United States which may hereafter be granted therefor, and in any and to any s, continuations-in-part, substitutions, divisions or reissues of said Letters Patent, and enjoyed by the said ASSIGNEE, for its interest, and for its own use and behalf, alf of its successors and assigns, to the full end of the term for which said Letters ed as fully and entirely as the same would have been held and enjoyed by me had sale not been made.			
	transfer and set over unto the said ASSIGNEE the rights to the priority application, onal application 62/815,375 filed on 3/08/2019.			
successors and assig lawful owner of the above-mentioned ar	ration aforesaid, I hereby covenant and agree to and with the said ASSIGNEE, its gns, that at the time of the execution and delivery of these presents I am a joint and entire right, title and interest in and to the invention, application and Letters Patent ad that the same are unencumbered, and that I have good right and lawful authority he same in the manner herein set forth.			
successors and assig	ration aforesaid, I hereby covenant and agree to and with the said ASSIGNEE, its gas, that I will, whenever its counsel or the counsel of its successors and assigns, hall advise that an amendment, division, continuation, continuation-in-part, or 1			

PATENT REEL: 048880 FRAME: 0654

substitution of, or any other proceeding in connection with said application, including interference proceedings, is lawful and desirable, sign all papers and drawings, take all rightful oaths, and do all acts necessary or required to be done for the procurement of valid Letters Patent for said invention, or for the reissue of the same without charge to the said ASSIGNEE, its successors or assigns, but at its or their expense.

I hereby request the Commissioner for Patents to issue the Letters Patent in accordance with this instrument.

For the consideration aforesaid, I have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, assigns or nominee, the entire right, title and interest in and to any and all Letters Patent for said invention which may be granted in countries foreign to the United States and in and to any applications for Letters Patent which may be filed for said invention in countries foreign to the United States and empower the said ASSIGNEE, its successors, assigns or nominees to apply for Letters Patent or other form of protection on said invention in its own name or in the name of its successor, assignee, or nominee, in any and all countries where it may desire to file such application and where said application may be filed by another than the inventor; and I hereby covenant and agree to sign all papers and drawings, take all rightful oaths, and do all acts necessary or required to be done for procurement of Letters Patent, or other form of protection, for said invention or inventions in countries foreign to the United States, and for further investing or confirming the right and title therein to the ASSIGNEE, its successors, assignee, or nominee, without charge to the said ASSIGNEE, its successor, assignee or nominee, but at its or their expense.

IN WITNESS WHEREOF, I hereunto set my hand and seal.

## LEGAL NAME OF INVENTOR

Inventor: Stephen Craig Parker	Date
Signature: Ht-Char Pol	

e: 4/12/19

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