

<b>PATENT ASSIGNMENT COVER SHEET</b>
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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>
ATSUSHI TAKANO	08/21/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Skyworks Solutions, Inc.
<b>Street Address:</b>	20 Sylvan Road
<b>City:</b>	Woburn
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	01801
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15828631
<b>CORRESPONDENCE DATA</b>	
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<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>	
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<b>ATTORNEY DOCKET NUMBER:</b>	SWKS 17174001(P12)US
<b>NAME OF SUBMITTER:</b>	DONALD BOLLELLA
<b>SIGNATURE:</b>	/Donald Bollella/
<b>DATE SIGNED:</b>	03/29/2019
<b>Total Attachments: 2</b>	
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## ASSIGNMENT

WHEREAS, I, Aisushi Takano (鷹野 敦) residing at 25-2, Tsukide Town, Kadoma-Shi, Osaka-Fu, 571-0052, Japan have invented certain new and useful METHODS OF MANUFACTURING ELECTRONIC DEVICES FORMED IN A CAVITY AND INCLUDING A VIA for which I have made application for Letters Patent of the United States as fully set forth and described in the specification duly filed in the United States Patent and Trademark Office on December 1, 2017 and assigned Application Serial No. 15/828,631, which derived priority benefit from U.S. Provisional Patent Application Serial No. 62/539,871 filed August 1, 2017, U.S. Provisional Patent Application Serial No. 62/539,873 filed August 1, 2017, U.S. Provisional Patent Application Serial No. 62/539,863 filed August 1, 2017, U.S. Provisional Patent Application Serial No. 62/539,861 filed August 1, 2017, U.S. Provisional Patent Application Serial No. 62/429,179 filed December 2, 2016, U.S. Provisional Patent Application Serial No. 62/429,183 filed December 2, 2016, U.S. Provisional Patent Application Serial No. 62/429,186 filed December 2, 2016, U.S. Provisional Patent Application Serial No. 62/429,188 filed December 2, 2016, U.S. Provisional Patent Application Serial No. 62/429,190 filed December 2, 2016, U.S. Provisional Patent Application Serial No. 62/429,218 filed December 2, 2016, U.S. Provisional Patent Application Serial No. 62/429,223 filed December 2, 2016, and U.S. Provisional Patent Application Serial No. 62/429,226 filed December 2, 2016; and

WHEREAS, Skyworks Solutions, Inc., a corporation duly organized and existing under and by virtue of the laws of the State of Delaware, having a principal business address at 20 Sylvan Road, Woburn, Massachusetts 01801, is desirous of acquiring the entire interest in and to said invention, said non-provisional and provisional applications, any and all inventions and improvements disclosed in said applications, and all Letters Patent to be had therefor.

NOW THEREFORE, to all whom it may concern, be it known, that for good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, I, said Aisushi Takano (鷹野 敦) have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over unto said Skyworks Solutions, Inc., the whole right, title, and interest in and to said METHODS OF MANUFACTURING ELECTRONIC DEVICES FORMED IN A CAVITY AND INCLUDING A VIA, the aforesaid applications, and any and all inventions and improvements disclosed in the aforesaid non-provisional and provisional applications for patent, as fully set forth and described therein, and all divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent derived from or claiming priority to the aforesaid applications which have been or shall be filed in the United States and in and to the United States Letters Patent to be issued thereon for the territory of the United States, and all corresponding foreign counterpart applications derived from or claiming priority to the aforesaid United States non-provisional and provisional patent applications and related applications as prepared for and filed in any and all foreign countries, said whole right, title, and interest being the same for said Skyworks Solutions, Inc.'s own use and for the use of its assigns, successors, and legal representatives to the full end of the term for which all 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. And I hereby acknowledge, agree, and understand that this assignment conveys any and all other related intellectual property rights including, but not so limited to, copyright rights, copyrightable subject matter, know how, trade secrets, copyright registrations, and reproduction rights, including any and all right to sue for past, current, or future infringement of the intellectual property rights hereby sold,

assigned, and transferred, and I further hereby waive any and all moral rights under 17 U.S.C. § 108A or as so otherwise provided.

And I, for myself, my heirs, assigns, and legal representatives hereby covenant to and with said assignee Skyworks Solutions, Inc., its assigns, successors, and legal representatives, that I have full right to sell, assign, and transfer the whole right, title, and interest in and to said inventions and improvements, said non-provisional and provisional applications, and all the Letters Patent to be had therefor and that the entire interest herein conveyed is free from all prior assignment, grant, mortgage, license, or other encumbrance whatsoever. And I also, for myself, my heirs, assigns, and legal representatives hereby further covenant to and with said assignee Skyworks Solutions, Inc., its assigns, successors, and legal representatives to fully cooperate therewith in the prosecution of the aforesaid applications in the United States Patent and Trademark Office and in any and all foreign jurisdictions, said cooperation extending to any U.S. or foreign divisional, continuing, substitute, renewal, reissue, or any other application derived from or claiming priority to the aforesaid applications, and including the execution of additional declarations, assignments, and other formal documents as may be required in connection therewith.

And I do hereby covenant and agree not to challenge or oppose, on any grounds whatsoever, the validity of this assignment or to assist or request any third party to contest the validity of this assignment, and I further agree not to contest the validity or enforceability of any intellectual property rights assigned herein, or to assist or request any third party to contest the validity or enforceability of any intellectual property rights assigned herein. And I also agree that no course of conduct or dealing by me shall act as an amendment, modification, or waiver of any provision of this assignment unless specifically set forth in writing.

And I do hereby authorize and request the United States Commissioner of Patents to issue Letters Patent to said Skyworks Solutions, Inc. as the assignee of my entire right, title, and interest therein.

IN TESTIMONY WHEREOF, I have hereunto set my respective hand and seal on the day and month of the year 2018 as indicated below.

A. Takano L.S. 鷹野 敦 L.S. 21 Aug. 2018  
Atsushi Takano 鷹野敦 Date

The undersigned hereby certifies that he/she personally witnessed the foregoing signature of Atsushi Takano (鷹野敦) handwritten in his/her presence in the city of Kadoma, Japan.

Witnessed by Shigeki Hosoya on this 21 day of August, 2018  
Witness Signature  
Print: Shigeki Hosoya and HR Director  
Witness Name Witness Title

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