

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4939460

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JOSEPH T. SMITH	03/11/2015
MICHAEL MARRS	03/11/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ARIZONA BOARD OF REGENTS, A BODY CORPORATE OF THE STATE OF ARIZONA, ACTING FOR AND ON BEHALF OF ARIZONA STATE UNIVERSITY
<b>Street Address:</b>	1475 NORTH SCOTTSDALE ROAD, SKY SONG - SUITE 200
<b>City:</b>	SCOTTSDALE
<b>State/Country:</b>	ARIZONA
<b>Postal Code:</b>	85257-3538
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14642563
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(602)364-7070
<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>	(602) 364-7000
<b>Email:</b>	Lisa.Mansur2@bryancave.com
<b>Correspondent Name:</b>	BRYAN CAVE LEIGHTON PAISNER LLP
<b>Address Line 1:</b>	TWO NORTH CENTRAL AVENUE, SUITE 2100
<b>Address Line 2:</b>	JULIE A. ESLICK
<b>Address Line 4:</b>	PHOENIX, ARIZONA 85004
<b>ATTORNEY DOCKET NUMBER:</b>	M12-229P/0339771-US
<b>NAME OF SUBMITTER:</b>	STEPHEN BENYI
<b>SIGNATURE:</b>	/Stephen Benyi/
<b>DATE SIGNED:</b>	04/30/2018
<b>Total Attachments: 3</b>	
source=M12-229P-0339771-US-Assignment#page1.tif	
source=M12-229P-0339771-US-Assignment#page2.tif	



ASSIGNMENT

In consideration of my agreement with Arizona Board of Regents, for and on behalf of Arizona State University, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, Joseph Smith, an individual residing in Tempe, Arizona, and I, Michael Marrs, an individual residing in Phoenix, Arizona (collectively, referred to herein as the "ASSIGNOR"), will assign, transfer, set over, convey, and deliver and do hereby assign, transfer, set over, convey, and deliver to Arizona Board of Regents, a body corporate of the State of Arizona, Acting for and on behalf of Arizona State University, and having a principal place of business located at 1475 North Scottsdale Road, Sky Song – Suite 200, Scottsdale, Arizona 85257-3538, its successors and assigns (collectively referred to herein as "ASSIGNEE"); all of my right, title, and interest in, to, and under any and all subject matter disclosed and/or claimed in the application(s) for patent, titled:

**DUAL ACTIVE LAYER SEMICONDUCTOR DEVICE AND METHOD OF  
MANUFACTURING THE SAME**

filed in the U.S. Patent and Trademark Office on March 9, 2015, and assigned Application No. 14/642,563; a copy of which has been provided to me and I have reviewed; in, to and under the application(s) and any and all utility, design, provisional, non-provisional, continuation, continuation-in-part, continued prosecution, request-for-continued-examination, and divisional applications thereof; in, to, and under, my exclusive right to make and prosecute any and all applications for patents, reissues, renewals, and extensions thereof; in, to, and under any and all patents and Convention and Treaty rights of all kinds, in the United States of America and all other countries throughout the world, for all such subject matter; in, to, and under any and all know-how and/or confidential, proprietary, and/or trade secret information relating to any such subject matter, applications, patents, and/or technology; in, to, and under the right to sue for present, past, and future infringement or misappropriation relating to any such subject matter, applications, patents, and/or technology; in, to, and under the right to enforce any rights and file any causes of action, in law and/or equity, relating to any such subject matter, applications, patents, and/or technology; and in, to, and under the right to all income, royalties, fees, damages, and payments now or hereafter due or payable in respect to any such subject matter, applications, patents, and/or technology. The right, title, and interest is to be held and enjoyed by ASSIGNEE and its successors and assigns as fully and exclusively as it would have been held and enjoyed by ASSIGNOR had this assignment not been made. I request the applicable official having authority to issue patents and/or corresponding rights to issue same on the subject matter of the invention(s) to ASSIGNEE, its successors and assigns, and, if called upon by ASSIGNEE, its successors, assigns, or legal representatives, I agree to promptly sign any and all documents necessary to secure any and all such patents and/or rights and for issuance of same to ASSIGNEE or its successors and assigns.

I covenant with ASSIGNEE, its successors, assigns, and legal representatives, that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license, or other encumbrance.

Attorney Docket No. M12-229P/0339771-US

I grant to ASSIGNEE, its successors, assigns, and legal representatives the power to insert on this Assignment any further identification, including the application numbers and filing dates, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office, and/or any other patent office in any other country throughout the world, for recordation of this document.

I confirm that I have not made any agreement in conflict with this Assignment. I further agree that I will provide information within my knowledge or belief, and do any and all other relevant things that ASSIGNEE, its successors, assigns, or legal representatives deem necessary or desirable and request of me in connection with obtaining and/or maintaining any such patents and/or rights; in connection with any proceeding, controversy, and/or litigation pertaining to any such patents and/or rights; in order to perfect and/or enforce the ownership by ASSIGNEE, its successors and assigns, of the right, title, and interest conveyed by this Assignment; and/or in connection with this Assignment, without payment of consideration to me beyond that called for in my written agreement with ASSIGNEE on the understanding, however, that ASSIGNEE will bear all reasonable expenses actually incurred for or in connection with such matters. This Assignment and the obligations assumed by me shall be binding on my heirs and personal representatives.

Date: 3/11/15  
Joseph Smith

Attorney Docket No. M12-229P/0339771-US

Date:

3-11-15

Michael Marrs  
Michael Marrs