

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3012142

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
SIDHARTH BALASUBRAMANIAN	09/08/2014
WALEED KHALIL	09/08/2014
VIPUL PATEL	08/09/2014
THE OHIO STATE UNIVERSITY	09/08/2014
RECEIVING PARTY DATA	
Name:	Government of the United States as Represented by the Secretary of the Air Force
Street Address:	2240 B. Street
Internal Address:	Building 11, Area B
City:	Wright-Patterson AFB
State/Country:	OHIO
Postal Code:	45433-7109
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14479400
CORRESPONDENCE DATA	
Fax Number:	(937)255-3733
<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>	
Email:	pamela.kuns@us.af.mil
Correspondent Name:	PAMELA KUNS
Address Line 1:	2240 B. STREET
Address Line 2:	BUILDING 11, AREA B
Address Line 4:	WRIGHT-PATTERSON AFB, OHIO 45433-7109
ATTORNEY DOCKET NUMBER:	AFD 1374
NAME OF SUBMITTER:	JASON SOPKO
SIGNATURE:	/Jason Sopko/
DATE SIGNED:	09/08/2014
This document serves as an Oath/Declaration (37 CFR 1.63).	
Total Attachments: 4	

PATENT

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DECLARATION / ASSIGNMENT
(Inventor with Co-inventors)

WHEREAS, I, Sidharth Balasubramanian, while employed by The Ohio State University ("University"), jointly made an invention with Waleed Khalil and Vipul J. Patel under contract/subcontract number NSF 1143344 described in invention disclosure AFD 1374 entitled "An Apparatus for High-speed Low-latency Switching in Current-Steering DACs", to be filed as an application for Letters Patent of the United States (Application serial number 14479400, filed 8 Sep 14), and I hereby authorize and request AFMCLO/JAZ to insert here in the above parentheses (Application serial number, filed) the filing date and application number of said application when known;

WHEREAS, The above-identified application for Letters Patent was made or authorized to be made by me;

WHEREAS, I believe that I am an original joint inventor of a claimed invention in the application;

WHEREAS, I hereby acknowledge that any willful false statement made in this Declaration/Assignment is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both; and

NOW, THEREFORE, to all whom it may concern, I, Sidharth Balasubramanian, in recognition of my obligation as an employee of the University to assign inventions to the University, hereby assign to the University, my entire right, title, and interest throughout the world in and to each invention disclosed and claimed in the above application for Letters Patent, made jointly with Waleed Khalil, employee of the University, and Vipul J. Patel, employee of the Government of the United States, and all Letters Patent issuing thereon and any continuations, continuations-in-part, divisions, and reissues or extensions thereof.

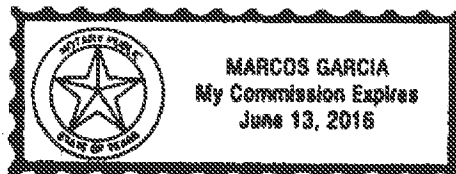
I agree to assist the University and the Government of the United States, upon request, by furnishing any available information and documents, performing all acts, and doing all things which may be reasonably necessary to timely prepare, file and prosecute such applications, and make this assignment effective.



Sidharth Balasubramanian

SUBSCRIBED AND ACKNOWLEDGED before me by Sidharth Balasubramanian this 21 day of

May 2014, at the city of Dallas in the County of Dallas and State of Texas.


Notary Public

DECLARATION / ASSIGNMENT
(Inventor with Co-inventors)

WHEREAS, I, **Waleed Khalil**, while employed by **The Ohio State University** ("University"), jointly made an invention with **Sidharth Balasubramanian** and **Vipul J. Patel** under contract/subcontract number **NSF 1143344** described in invention disclosure AFD 1374 entitled "An Apparatus for High-speed Low-latency Switching in Current-Steering DACs", to be filed as an application for Letters Patent of the United States (Application serial number - 14479400, filed 8 Sep 14), and I hereby authorize and request AFMCLO/JAZ to insert here in the above parentheses (Application serial number, filed) the filing date and application number of said application when known;

WHEREAS, The above-identified application for Letters Patent was made or authorized to be made by me;

WHEREAS, I believe that I am an original joint inventor of a claimed invention in the application;

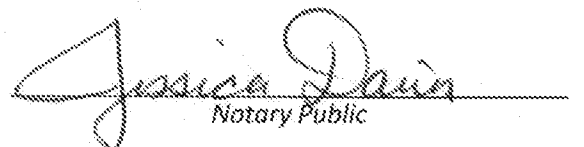
WHEREAS, I hereby acknowledge that any willful false statement made in this Declaration/Assignment is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both; and

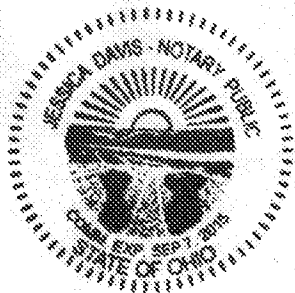
NOW, THEREFORE, to all whom it may concern, I, **Waleed Khalil**, in recognition of my obligation as an employee of the University to assign inventions to the University, hereby assign to the University, my entire right, title, and interest throughout the world in and to each invention disclosed and claimed in the above application for Letters Patent, made jointly with **Sidharth Balasubramanian**, employee of the University, and **Vipul J. Patel**, employee of the Government of the United States, and all Letters Patent issuing thereon and any continuations, continuations-in-part, divisions, and reissues or extensions thereof.

I agree to assist the University and the Government of the United States, upon request, by furnishing any available information and documents, performing all acts, and doing all things which may be reasonably necessary to timely prepare, file and prosecute such applications, and make this assignment effective.


Waleed Khalil

SUBSCRIBED AND ACKNOWLEDGED before me by **Waleed Khalil** this 22nd day of May 2014, at the city of Columbus in the County of Franklin and State of Ohio.


Notary Public



ASSIGNMENT

I certify that **Sidharth Balasubramanian** and **Waleed Khalil** were employees of The Ohio State University ("University") at the time of developing an invention with **Waleed Khalil and Vipul J. Patel** under contract number **N5F 1143344** described in invention disclosure AFD 1374 entitled "An Apparatus for High-speed Low-latency Switching in Current-Steering DACs", to be filed as an application for Letters Patent of the United States (Application serial number - 14479400, filed 8 Sep 14), and I hereby authorize and request AFMCLO/JAZ to insert here in the above parentheses (Application serial number, filed) the filing date and application number of said application when known;

I further certify that **Sidharth Balasubramanian** and **Waleed Khalil** have fully assigned their right and interest in the invention to the University prior to the execution of this assignment document.

Therefore, the University herein assigns its rights in the above cited disclosure to the Government of the United States consistent with our rights and obligations under contract and statute, subject to the reservation to the University of any license to which the University may be entitled under the above contract or statute. This assignment is duly signed below by the University's Officer or Agent for and on behalf of said University by authority of its governing body, and is within the scope of the Officer's or Agent's powers.

FOR THE UNIVERSITY

University: The Ohio State University

By: *Erin Bender*
(Signature of officer or agent)

Date: June 10, 2014

Printed Name: Erin K. Bender

Title: Associate Director

Business Address: 1524 North High St., Columbus OH

Business Phone: 614.292.1315

SUBSCRIBED AND ACKNOWLEDGED before me by Contractor Inventor this 10th day of June 2014, at the city of Columbus in the County of Franklin and State of Ohio.



Jennifer Sue Warner
Notary Public, State of Ohio
My Commission Expires 10-28-2014

Notary Public
Jennifer Sue Warner

**DECLARATION / ASSIGNMENT
(Inventor with Co-Inventors)**

WHEREAS, I, **Vipul J. Patel**, while employed by the Government of the United States, jointly made an invention with **Sidharth Balasubramanian and Waleed Khalil** described in invention disclosure AFD 1374 entitled "An Apparatus for High-Speed Low-Latency Switching in Current-Steering DACs", to be filed as an application for Letters Patent of the United States (Application serial number 14479400, filed 8 Sep 14), and I hereby authorize and request AFMCLO/JAZ to insert here in the above parentheses (Application number, filed) the filing date and application number of said application when known;

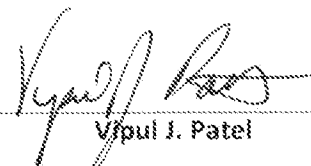
WHEREAS, The above-identified application for Letters Patent was made or authorized to be made by me;

WHEREAS, I believe that I am an original joint inventor of a claimed invention in the application;

WHEREAS, I hereby acknowledge that any willful false statement made in this Declaration/Assignment is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both;

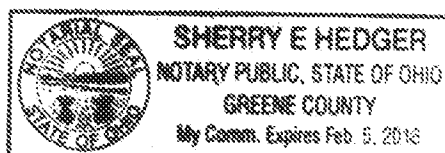
WHEREAS, the conditions under which said invention was made are such as to entitle the Government of the United States under Paragraph 1(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights; and

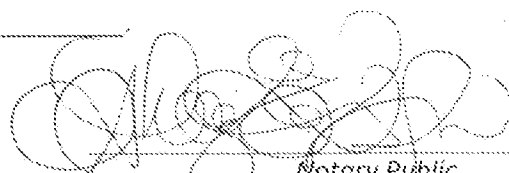
NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the premises and other valuable considerations, I, **Vipul J. Patel**, have sold, assigned, and transferred, and by these presents do sell, assign, and transfer unto the Government of the United States, as represented by the Secretary of the Air Force, my entire right, title and interest throughout the world in and to the aforesaid invention described in the aforesaid application for Letters Patent of the United States and all Letters Patent issuing thereon and any continuations, continuations-in-part, divisions, and reissues or extensions thereof; and all priority resulting from the filing of the aforesaid application for patent in the United States; I hereby authorize and request any official whose duty it is to issue patents to issue any patent thereon to the Government of the United States, as represented by the Secretary of the Air Force, and his successors, as assignee of my entire right, title and interest in and to the same, for the sole use for the full term or terms for which said patents and any continuations, continuations-in-part, divisions and reissues or extensions thereof are, or may be, granted as fully and entirely as the same would have been held by me had this Assignment not been made; and I do hereby also grant to the Government of the United States, as represented by the Secretary of the Air Force, the option to take the entire right, title and interest in the invention or all applications for Letters Patent thereon in all countries foreign to the United States in which the Government of the United States may file, or cause to be filed, applications for Letters Patent, without payment to me of any further consideration; provided, however, that this grant of an option to take foreign rights in the invention must be exercised by written notice to me within eight months of the filing date of any application for United States Letters Patent covering the invention, or within eight months from the declassification of the invention, whichever is later, and that all foreign rights not exercised under the option are left to me subject to a nonexclusive, irrevocable, royalty-free license to the Government of the United States in any patent which may issue on said invention in any foreign country, including the power to issue sublicenses for use on behalf of the Government of the United States and/or in furtherance of the foreign policies of the United States of America; and I hereby agree to execute any and all applications for Letters Patent, and to furnish all data and documents and to execute any papers which may be necessary or convenient for the preparation, filing, or prosecution of such applications, except it is understood that I shall not be subject to any out-of-pocket expense relative to such action.


Vipul J. Patel

SUBSCRIBED AND ACKNOWLEDGED before me by **Vipul J. Patel** this 13th day of

August 2014, at the city of DAYTON in the County of GREENE and State of OHIO




Notary Public
SHERRY E. HEDGER

PATENT

RECORDED: 09/08/2014

REEL: 033685 FRAME: 0739