

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	LICENSE
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CALIFORNIA INSTITUTE OF TECHNOLOGY	11/09/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	UNITED STATES OF AMERICA AS REPRESENTED BY THE ADMINISTRATOR OF NASA
<b>Street Address:</b>	300 E ST SW
<b>City:</b>	WASHINGTON
<b>State/Country:</b>	D.C.
<b>Postal Code:</b>	20024
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16186066
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<b>SIGNATURE:</b>	/DERRICK MCINTYRE/
<b>DATE SIGNED:</b>	08/01/2019
<b>Total Attachments: 1</b>	
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## License to the Government

In accordance with a contract set forth below between the Government of the United States of America, as represented by the Administrator of the National Aeronautics and Space Administration (NASA) and the below-named Contractor, the invention cited below is a SUBJECT INVENTION made in the performance of work under the contract and the   x   Contractor has elected to retain title the SUBJECT INVENTION; or        the Contractor has elected not to retain title to the SUBJECT INVENTION; and NASA, after consultation with the Contractor, has granted the request for retention of rights by the Inventor, and employee of the Contractor, subject to the provisions of 35 U.S.C § 202(d) and FAR 52.227-11, Patent Rights-Retention by the Contractor, but subject to a license to the Government as described below.

NOW THEREFORE, pursuant to the terms and conditions of the contract, the Contractor/Inventor does hereby grant to the Government of the United States a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States this SUBJECT INVENTION and any patents which may issue thereon throughout the world. At this time at least the following U.S. patent application has been filed on the SUBJECT INVENTION.

Title: Frequency Translating Backscatter Modulator With Envelope Control To Support Ofdm/Qam And Other Envelope

Patent Application Serial No.: 16/186,066 Filed: Friday, November 09, 2018	Contractor: California Institute of Technology  Contractor Case No: CIT-7503-US NASA Case No: NPO 50156 Contract No: NNN12AA01C
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The Contractor/Inventor agrees to conclude, within the specification of any United States patent applications and any patents issuing thereon covering this SUBJECT INVENTION, the following statement as in FAR 52.227-11(f)(4):

This invention was made with Government support under contract NNN12AA01C awarded by NASA. The Government has certain rights in this invention.

The Contractor/Inventor further agrees to notify the NASA of any decision not to continue prosecution of the application(s), pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than thirty days before the expiration period required by the U.S. Patent and Trademark Office.

Title to this Invention is subject to March-In-Rights by the NASA as stated in 35 U.S.C. § 203 and FAR 52.227-11(j).

The Contractor/Inventor shall furnish a copy of the patent application cited above and a listing of each country in which applications have been and are filed. Whenever a patent issues on the SUBJECT INVENTION, the patent number, the issue date, and the country shall be made known to the Government as soon as it is available to the Contractor/Inventor.

Fred Farina  
Chief Innovation Officer

(Typed name and title of Corporate Officer)

(Signature and date)