PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
FRANCESCO MARSILI	04/28/2014
SAE WOO NAM	04/12/2014
VARUN BOEHM VERMA	04/25/2014

RECEIVING PARTY DATA

Name:	GOVERNMENT OF THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY OF COMMERCE, THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13869802

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	11-011/12-032
NAME OF SUBMITTER:	BRENDA L. THOMASSON
SIGNATURE:	/Brenda I. thomasson/
DATE SIGNED:	05/12/2014

Total Attachments: 4

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REEL: 032869 FRAME: 0218

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> PATENT REEL: 032869 FRAME: 0219

NIST Docket number: 12-032

ASSIGNMENT OF PATENT RIGHTS

We, SAE WOO NAM, residing in BOULDER COLORADO and VARUN BOEHM VERMA,

residing in LAFAYETTE, COLORADO invented "VERTICAL STACKING OF

SUPERCONDUCTING NANOWIRE AVALANCHE PHOTODETECTORS BASED ON

AMORPHOUS TUNGSTEN SILICIDE" and have filed an application for United States Letters

Patent, Serial Number 13/869,802 on April 24, 2013.

The invention was made while we were employees of the United States Department of

Commerce and under such circumstances that applicable laws and regulations render the patent

rights assignable to the United States. The United States of America, represented by the

Secretary of Commerce, wishes to acquire these rights.

Therefore, we assign to the United States of America, as represented by the Secretary of

Commerce, our full and exclusive world-wide rights to this invention. As consideration for this

Assignment, we will be treated as inventors whose rights are assigned to the United States, for

royalty sharing purposes, if royalties are ever collected, as explained in Section 3710c of Title 15

of the United States Code. This invention and its derivative applications in the United States

Patent and Trademark Office and United States Letters Patent are to be held by the United States

of America for the full term for which such Letters Patent may be granted as completely as they

would have been held by us had we not made this assignment.

PATENT

REEL: 032869 FRAME: 0220

We agree to make, execute, and deliver to the Secretary of Commerce all documents in such usual or other forms, terms, or contents as may be required by the Secretary for the prosecution of all applications arising from this invention, as well as after issuance of Letters Patent, and for the settlement of any interference or other action or proceeding, these applications and Letters Patent may encounter. We will aid the United States of America in every way to protect the invention as requested by the Secretary, except that any expenses arising through such assistance will be borne, through proper arrangement, by the United States of America.

We warrant that there are no outstanding assignments, grants, liens, encumbrances, or agreements, oral, written, or implied, that will impair the interests conveyed in this assignment at the time we execute this instrument.

IN TESTIMONY WHEREOF, we sign

4/12/14 DATE

PATENT REEL: 032869 FRAME: 0221 NIST Docket number: 12-032

ASSIGNMENT OF PATENT RIGHTS

I, FRANCESCO MARSILI, residing in BOULDER, COLORADO, invented "VERTICAL

STACKING OF SUPERCONDUCTING NANOWIRE AVALANCHE PHOTODETECTORS

BASED ON AMORPHOUS TUNGSTEN SILICIDE." and filed an application for United States

Letter Patent, Serial Number 13/869,802 on April 24, 2013.

The invention was made while I was a Guest Researcher at the National Institute of Standards

and Technology, the United States Department of Commerce, and under such circumstances that

applicable laws, and regulations and agreements render the patent rights within the United States

assignable to the United States. The United States of America, represented by the Secretary of

Commerce, wishes to acquire these rights.

Therefore, I assign to the United States of America, as represented by the Secretary of

Commerce, my full and exclusive rights within the United States to this invention. As

consideration for this Assignment, I will be treated as an inventor whose rights are assigned to

the United States, for royalty sharing purposes, if royalties are ever collected, as explained in

Section 3710c of Title 15 of the United States Code. This invention and its derivative

applications in the United States Patent and Trademark Office and United States Letters Patent

are to be held by the United States of America for the full term for which such Letters Patent may

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PATENT REEL: 032869 FRAME: 0222 be granted as completely as they would have been held by me had I not made this assignment.

I agree to make, execute, and deliver to the Secretary of Commerce all documents in such usual or other forms, terms, or contents as may be required by the Secretary for the prosecution of all domestic applications arising from this invention, as well as after issuance of Letters Patent, and for the settlement of any interferences or other actions or proceedings these applications and Letters Patent may encounter. I will aid the United States of America in every way to protect the invention as requested by the Secretary, except that any expenses arising through such assistance will be borne, through proper arrangement, by the United States of America.

I warrant that there are no outstanding assignments, grants, liens, encumbrances, or agreements, oral, written, or implied, that will impair the interests conveyed in this assignment at the time I execute this instrument.

IN TESTIMONY WHEREOF, I sign.

FRANCESCO MARSILI

RECORDED: 05/12/2014