PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BORIS N. FEIGELSON	02/04/2016
JORDAN GREENLEE	12/03/2015
TRAVIS J. ANDERSON	02/02/2016
FRANCIS J. KUB	02/02/2016

RECEIVING PARTY DATA

Name:	THE GOVERNMENT OF THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY OF THE NAVY
Street Address:	875 NORTH RANDOLPH STREET
Internal Address:	SUITE 1425
City:	ARLINGTON
State/Country:	VIRGINIA
Postal Code:	22203

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15015381

CORRESPONDENCE DATA

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Correspondent Name: NAVAL RESEARCH LABORATORY ASSOCIATE COUN

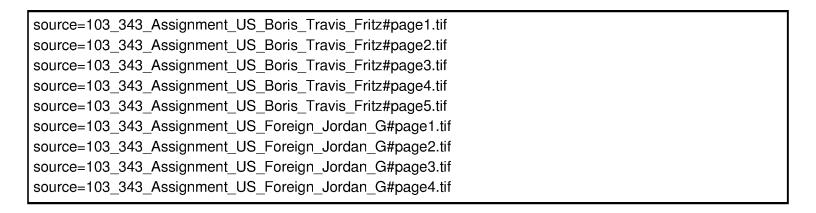
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ATTORNEY DOCKET NUMBER:	103343-US2
NAME OF SUBMITTER:	JOSLYN BARRITT
SIGNATURE:	/ Joslyn Barritt /
DATE SIGNED:	02/04/2016

Total Attachments: 9

PATENT REEL: 037663 FRAME: 0931



PATENT REEL: 037663 FRAME: 0932 ASSIGNMENT BY INVENTORS (UNITED STATES PATENTS)

THIS ASSIGNMENT, made by Boris N. Feigelson; Travis J. Anderson; and Francis

J. Kub (hereinafter referred to as Assignors), residing at 6616 Red Jacket Road, Springfield,

Virginia 22152; 2208 Basset St., Alexandria, Virginia 22308; and 1103 Spy Glass Dr, Arnold,

Maryland 21012, respectively;

WHEREAS, Assignors, while employed by the Government of the United States,

have invented certain new and useful improvements in Defects Annealing and Impurities

Activation in Semiconductors at Thermodynamically Non-Stable Conditions, set forth in a

Provisional application for Letters Patent of the United States filed on February 6, 2015 as U.S.

Application No. 62/112682 and in Defects Annealing and Impurities Activation in

Semiconductors at Thermodynamically Non-Stable Conditions, set forth in a Patent

Application for Letters Patent of the United States filed herewith; and

WHEREAS, The Government of the United States of America, as represented by the

Secretary of the Navy, a Federal Agency (hereinafter referred to as the Government), is desirous

of acquiring the entire right, title and interest in and to said inventions and said Application(s) for

Letters Patent of the United States, and in and to any Letters Patent of the United States to be

obtained therefor and thereon;

WHEREAS, by acquiring the Assignors' entire right, title, and interest in and to the

invention the Government will be enabled to license the invention and share the income from the

licensing with the Assignors as allowed by law;

WHEREAS, the conditions under which the invention was made are such as to

entitle the Government under Paragraph 1(a) of Executive Order 10096, to the Assignors' entire

right, title, and interest therein, including the foreign rights; and

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WHEREAS, as to foreign rights, it is the policy of the Government to obtain an

option to exercise such rights;

NOW, THEREFORE, in consideration of the premises and other good and

sufficient consideration, the receipt of which is hereby acknowledged, Assignors have assigned,

transferred and set over, and by these presents do assign, transfer and set over, unto the

Government, its successors, legal representatives and assigns, the entire right, title and interest in

and to the above-mentioned inventions and application(s) for Letters Patent, and in and to any

and all direct and indirect divisions, continuations and continuations-in-part of said

application(s), and any and all Letters Patent in the United States which may be granted therefor

and thereon, and reissues, reexaminations and extensions of said Letters Patent, the same to be

held and enjoyed by the Government, for its own use and benefit and the use and benefit of its

successors, legal representatives and assigns, to the full end of the term or terms for which

Letters Patent may be granted and/or extended, as fully and entirely as the same would have been

held and enjoyed by Assignors, had this assignment not been made.

AND for the same consideration, Assignors hereby represent and warrant to the

Government, its successors, legal representatives and assigns, that, at the time of execution and

delivery of these presents, except for any rights, titles and/or interests that have arisen to the

Government under law or that have already been transferred to the Government, Assignors are

the sole and lawful owners of the entire right, title and interest in and to the said inventions and

application(s) for Letters Patent above-mentioned, and that the same are unencumbered and that

Assignors have good and full right and lawful authority to sell and convey the same in the

manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with

the Government, its successors, legal representatives and assigns, that Assignors will sign all

papers and documents, take all lawful oaths and do all acts necessary or required to be done for

the procurement, maintenance, enforcement and defense of any Letters Patent and applications

for Letters Patent for said inventions in the U.S. or any foreign country, without charge to the

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Government, its successors, legal representatives and assigns, whenever counsel of the Government, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application(s) for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application(s) for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of the Government, its successors, legal representatives and assigns.

AND the Assignors do hereby also grant unto the Government, the option to take the Assignors' entire right, title, and interest in the invention and all patent applications or other forms of protection thereon in all countries foreign to the United States in which the Government may file, or cause to be filed, applications for Letters Patent or other forms of protection, without payment of any consideration; provided, however, that this grant of an option to take foreign rights in the invention, or applications or other forms of protection thereon, shall have force and effect only as to such applications for which a decision to file in foreign countries is made within eight months of the filing date of any application for United States Letters Patent and/or any provisional application 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 Assignors subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent or other form of protection which may issue on said invention in any foreign country, including the power to issue sub-licenses for use in behalf of the Government and/or in furtherance of the foreign policies of the Government.

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AND the Assignors do hereby also grant unto the Government, the right to claim

priority to the application(s) identified above.

AND the Assignors hereby further agree to make, execute, and deliver to the

Government, any and all papers, documents, affidavits, statements, or other instruments that may

be necessary in the prosecution of the application(s) and of any continuation, division, or

substitution of the application(s), or any application(s) for reissue or extension of said Letters

Patent, and to assist the Government in every way in protecting the invention as may be

requested, provided that any expense arising through such efforts will be paid by the

Government.

AND Assignors hereby appoint all practitioners at Customer Number 26384, all of

US Naval Research Laboratory, 4555 Overlook Ave, SW, Code 1008.2, Washington, DC

20375, jointly, and each of them severally, our attorneys at law/patent agent(s), with full power

of substitution, delegation and revocation, to prosecute the above-mentioned application(s), to

make alterations and amendments therein, and to transact all business in the U. S. Patent and

Trademark Office connected therewith.

AND Assignors hereby grant the following individuals the power to insert on this

Assignment any further identification which may be necessary or desirable in order to comply

with the rules of the United States Patent and Trademark Office for recordation of this document:

US NAVAL RESEARCH LABORATORY

All practitioners at Customer Number 26384.

Date: 02/04/16 Signature:_

Boris N. Feigelson, Assignor

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Date: 2/2/2016	Signature: Travis J. Anderson, Assignor
Date: 2/2/2016	Signature: Francis J. Kub, Assignor
Date: 2/4/(6	Signature: Kerry L. Broome, for Assignee, The Government of the United States of America

ASSIGNMENT BY INVENTOR

THIS ASSIGNMENT, made by Jordan Greenlee (hereinafter referred to as

Assignor), residing at 4172 East Trekker Rim Drive, Boise, Idaho 83716, UNITED STATES OF

AMERICA;

WHEREAS, Assignor has invented certain new and useful improvements in Defects

Annealing and Impurities Activation in Semiconductors at Thermodynamically Non-Stable

Conditions, set forth in a Provisional application for Letters Patent of the United States filed on

February 6, 2015 as U.S. Application No. 62/112682, in a Patent Application for Letters Patent

of the United States filed herewith, and in an International Patent Application filed herewith; and

WHEREAS, The Government of the United States of America, as represented by

the Secretary of the Navy, a Federal Agency (hereinafter referred to as the Government), is

desirous of acquiring the entire right, title and interest in and to said inventions and said

Application(s) for Letters Patent of the United States, and in and to any Letters Patent of the

United States to be obtained therefor and thereon and in and to any foreign patents to be

obtained therefor and thereon;

WHEREAS, by acquiring the Assignor's entire right, title, and interest in and to the

invention the Government will be enabled to license the invention and share the income from

the licensing with the Assignor as allowed by law;

NOW, THEREFORE, in consideration of the premises and other good and

sufficient consideration, the receipt of which is hereby acknowledged, Assignor has assigned,

transferred and set over, and by these presents does assign, transfer and set over, unto the

Government, its successors, legal representatives and assigns, subject to a nonexclusive and

royalty-free license which is hereby reserved to Contractor, the entire right, title and interest in

and to the above-mentioned inventions and application(s) for Letters Patent, and in and to any

and all direct and indirect divisions, continuations and continuations-in-part of said

Attorney Docket No. 103343

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application(s), and any and all Letters Patent in the United States and in all other Patent

Cooperation Treaty member states which may be granted therefor and thereon, and reissues,

reexaminations and extensions of said Letters Patent, and all rights under the International

Convention for the Protection of Industrial Property, the same to be held and enjoyed by the

Government, for its own use and benefit and the use and benefit of its successors, legal

representatives and assigns, to the full end of the term or terms for which Letters Patent may be

granted and/or extended, as fully and entirely as the same would have been held and enjoyed by

Assignor, had this assignment not been made.

AND the license reserved to the Contractor shall extend to all existing and future

associated and affiliated companies, if any within the corporate structure of Contractor is a part

and shall be assignable to the successor of that part of Contractor's business to which such

invention pertains.

AND for the same consideration, Assignor hereby represents and warrants to the

Government, its successors, legal representatives and assigns, that, at the time of execution and

delivery of these presents, except for any rights, titles and/or interests that have arisen to the

Government under law or that have already been transferred to the Government, Assignor is the

sole and lawful owner of the entire right, title and interest in and to the said inventions and

application(s) for Letters Patent above-mentioned, and that the same are unencumbered and that

Assignor has good and full right and lawful authority to sell and convey the same in the manner

herein set forth.

AND for the same consideration, Assignor hereby covenants and agrees to and with

the Government, its successors, legal representatives and assigns, that Assignor will sign all

papers and documents, take all lawful oaths and do all acts necessary or required to be done for

the procurement, maintenance, enforcement and defense of any Letters Patent and applications

for Letters Patent for said inventions in the U.S. or any foreign country, without charge to the

Government, its successors, legal representatives and assigns, whenever counsel of the

Government, or counsel of its successors, legal representatives and assigns, shall advise: that

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any proceeding in connection with said inventions, or said Patent application(s) for Letters

Patent, or any proceeding in connection with any Letters Patent or applications for Letters

Patent for said inventions including but not limited to interference proceedings, is lawful and

desirable; or, that any division, continuation or continuation-in-part of any application(s) for

Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained

thereon, is lawful and desirable.

AND Assignor hereby requests the Commissioner of Patent and Trademarks to issue

said Letters Patent of the United States to Assignee, as Assignee of said inventions and the

Letters Patent to be issued thereon, for the sole use and benefit of the Government, its

successors, legal representatives and assigns.

AND the Assignor does hereby also grant unto the Government, the right to claim

priority to the application(s) identified above.

AND the Assignor hereby further agrees to make, execute, and deliver to the

Government, any and all papers, documents, affidavits, statements, or other instruments that

may be necessary in the prosecution of the application(s) and of any continuation, division, or

substitution of the application(s), or any application(s) for reissue or extension of said Letters

Patent, and to assist the Government in every way in protecting the invention as may be

requested, provided that any expense arising through such efforts will be paid by the

Government.

AND Assignor hereby appoints all practitioners at Customer Number 26384, all of

US Naval Research Laboratory, 4555 Overlook Ave, SW, Code 1008.2, Washington, DC

20375, jointly, and each of them severally, my attorneys at law/patent agent(s), with full power

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of substitution, delegation and revocation, to prosecute the above-mentioned application(s), to make alterations and amendments therein, and to transact all business in the U.S. Patent and Trademark Office connected therewith and in all other Patent Cooperation Treaty member states which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Government.

AND Assignor hereby grants the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office and any foreign patent office for recordation of this document:

US NAVAL RESEARCH LABORATORY

All practitioners at Customer Number 26384.

Date: 12/3/2015 Signature: John Signature: John Greenlee, Assignor Witness! Oate: 12/03/15 Signature: ANENDYA NATH Signature: JAWA Wollnershouser

Date: 21414

Signature: HLRu

Kerry L. Broome, for Assignee. The Government of the United States

of America

Attorney Docket No. 103343

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RECORDED: 02/04/2016