

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6228223

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ROBERT A. WOLKOW	03/16/2020
ROSHAN ACHAL	03/16/2020
TALEANA HUFF	03/16/2020
HATEM LABIDI	07/23/2020
LUCIAN LIVADARU	03/16/2020
PAUL PIVA	03/16/2020
MOHAMMAD RASHIDI	03/16/2020
RECEIVING PARTY DATA	
Name:	QUANTUM SILICON INC.
Street Address:	11421 SASKATCHEWAN DRIVE
City:	EDMONTON (AB)
State/Country:	CANADA
Postal Code:	T6G 2M9
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16318626
CORRESPONDENCE DATA	
Fax Number:	(248)440-7300
<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>	
Phone:	248-430-5770
Email:	jl@bluefilamentlaw.com
Correspondent Name:	BLUE FILAMENT LAW PLLC
Address Line 1:	700 E. MAPLE ROAD
Address Line 2:	SUITE 450
Address Line 4:	BIRMINGHAM, MICHIGAN 48009
ATTORNEY DOCKET NUMBER:	QUAN-0100US
NAME OF SUBMITTER:	AVERY N. GOLDSTEIN, PH.D.
SIGNATURE:	/Avery N. Goldstein, Ph.D./
DATE SIGNED:	07/31/2020

PATENT

Total Attachments: 7

source=QUAN_0100US_Combined_Dec_Assignment#page1.tif

source=QUAN_0100US_Combined_Dec_Assignment#page2.tif

source=QUAN_0100US_Combined_Dec_Assignment#page3.tif

source=QUAN_0100US_Combined_Dec_Assignment#page4.tif

source=QUAN_0100US_Combined_Dec_Assignment#page5.tif

source=QUAN_0100US_Combined_Dec_Assignment#page6.tif

source=QUAN_0100US_Combined_Dec_Assignment#page7.tif

COMBINED OATH/DECLARATION AND ASSIGNMENT BY INVENTOR(S)

THIS ASSIGNMENT, made this _____ day of _____, 2020, by **Robert A. Wolkow, Roshan Achal, Taleana Huff, Hatem Labidi, Lucian Livadaru, Paul Piva, and Mohammad Rashidi** (hereinafter referred to as Assignor(s)), routinely receiving mail at 11421 Saskatchewan Drive, Edmonton, Alberta T6G 2M9 CANADA; and

WHEREAS, Assignor(s) has invented certain new and useful improvements in **MULTIPLE SILICON ATOM QUANTUM DOT AND DEVICES INCLUSIVE THEREOF**, set forth in a United States Patent Application filed on January 17, 2019, Serial No. 16/318,626, and which priority was claimed designating the International Application filed on July 19, 2017, Serial No. PCT/IB2017/001051, and to which claims priority to U.S. Provisional Applications filed on August 24, 2016, Serial No. 62/379,164; and July 19, 2016, Serial No. 62/364,206, respectively; and

WHEREAS, QUANTUM SILICON INC., a corporation organized under and pursuant to the laws of CANADA, having its principal place of business at 11421 Saskatchewan Drive, Edmonton, Alberta T6G 2M9, CANADA, (hereinafter referred to as Assignee(s)), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor(s) has sold, assigned, transferred and set over, and by these presents does sell, assign, transfer and set over, unto Assignee(s), its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries 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 Assignee(s), 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(s), had this sale and assignment not been made; and including the right to recover for past, present and future infringement and damages.

AND for the same consideration, Assignor(s) hereby represents and warrants to Assignee(s), 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 Assignee(s) under law or that have already been transferred to Assignee(s), Assignor(s) is/are the sole and lawful owner(s) of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignor(s) 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(s) hereby covenants and agrees to and with Assignee(s), its successors, legal representatives and assigns, that Assignor(s) 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, without charge to Assignee(s), its successors, legal representatives and assigns, whenever counsel of Assignee(s), or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignor(s) hereby requests the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee(s), as Assignee(s) of said inventions and the

Letters Patent to be issued thereon, for the sole use and benefit of Assignee(s), its successors, legal representatives and assigns.

AND Assignor(s) 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 for recordation of this document:


Avery N. Goldstein, Ph.D.

BLUE FILAMENT LAW PLLC

All practitioners at Customer Number 13173

AND Assignor(s) acknowledges an obligation of assignment of this invention to Assignee(s) at the time the invention was made.

The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Dated: March 16 2020 Signature: 
Robert A. Wolkow

Dated: _____ Signature: _____
Roshan Achal

Dated: _____ Signature: _____
Taleana Huff

Letters Patent to be issued thereon, for the sole use and benefit of Assignee(s), its successors, legal representatives and assigns.

AND Assignor(s) 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 for recordation of this document:

Avery N. Goldstein, Ph.D.

BLUE FILAMENT LAW PLLC

All practitioners at Customer Number 13173

AND Assignor(s) acknowledges an obligation of assignment of this invention to Assignee(s) at the time the invention was made.

The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Dated: _____ Signature: _____
Robert A. Wolkow

Dated: Mar 16 2020 Signature: _____
Roshan Achal

Dated: March 16 2020 Signature: _____
Taleana Huff

Dated: _____

Signature: _____

Hatem Labidi

March 16, 2020

Dated: _____

Signature: _____

Lucian Livadaru

Dated: 16 March 2020

Signature: _____

Paul Piva

Dated: March 16, 2020

Signature: _____

Mohammad Rashidi

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	MULTIPLE SILICON ATOM QUANTUM DOT AND DEVICES INCLUSIVE THEREOF		
This statement is directed to:			
<input type="checkbox"/> The attached application,			
OR			
<input checked="" type="checkbox"/> United States application or PCT international application number <u>16/318,626</u> filed on <u>January 17, 2019</u> .			
LEGAL NAME of inventor to whom this substitute statement applies:			
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)			
Hatem Labidi			
Residence (except for a deceased or legally incapacitated inventor):			
City	Edmonton	State	Country
			Canada
Mailing Address (except for a deceased or legally incapacitated inventor):			
11421 Saskatchewan Drive			
City	Edmonton	State	Country
		Zip	Canada
		T6G 2M9	
I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.			
The above-identified application was made or authorized to be made by me.			
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.			
Relationship to the inventor to whom this substitute statement applies:			
<input type="checkbox"/> Legal Representative (for deceased or legally incapacitated inventor only),			
<input type="checkbox"/> Assignee,			
<input checked="" type="checkbox"/> Person to whom the inventor is under an obligation to assign,			
<input type="checkbox"/> Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or			
<input type="checkbox"/> Joint Inventor.			

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PATENT
REEL: 053362 FRAME: 0801

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- Inventor is deceased,
- Inventor is under legal incapacity,
- Inventor cannot be found or reached after diligent effort, or
- Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

PERSON EXECUTING THIS SUBSTITUTE STATEMENT:Name: **Kenneth Gordon** Date (Optional):Signature: **/Kenneth Gordon/****APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:**

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Quantum Silicon Inc.

Applicant Name:

Title of Person Executing
This Substitute Statement: **President and CEO**

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):City **Edmonton** State Country **Canada**

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

11421 Saskatchewan DriveCity **Edmonton** State Zip **T6G 2M9** Country **Canada**

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.