

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5179021

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SEMLUX TECHNOLOGIES INC,	04/09/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ALLEPPEY V HARIHARAN
<b>Street Address:</b>	3225 SUMMER CANYON DR
<b>City:</b>	AUSTIN
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	78732
<b>Name:</b>	JAGANNATHAN RAVI
<b>Street Address:</b>	236 DAVIS ROAD
<b>City:</b>	BEDFORD
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	01730
<b>PROPERTY NUMBERS Total: 4</b>	
<b>Property Type</b>	<b>Number</b>
Patent Number:	9061439
Patent Number:	9067338
Patent Number:	9067792
Patent Number:	9206508
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<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>	
<b>Phone:</b>	5126929529
<b>Email:</b>	avhariharan@gmail.com
<b>Correspondent Name:</b>	ALLEPPEY V HARIHARAN
<b>Address Line 1:</b>	3225 SUMMER CANYON DR
<b>Address Line 4:</b>	AUSTIN, TEXAS 78732
<b>NAME OF SUBMITTER:</b>	ALLEPPEY V HARIHARAN
<b>SIGNATURE:</b>	/avhariharan/

<b>DATE SIGNED:</b>	10/09/2018
	This document serves as an Oath/Declaration (37 CFR 1.63).
<b>Total Attachments: 8</b> source=Patent-US9061439#page1.tif source=Patent-US9061439#page2.tif source=Patent-US9067338#page1.tif source=Patent-US9067338#page2.tif source=Patent-US9067792#page1.tif source=Patent-US9067792#page2.tif source=Patent-US9206508#page1.tif source=Patent-US9206508#page2.tif	

## ASSIGNMENT OF ISSUED PATENT

**THIS AGREEMENT** is made this 09 day of April, 2018, by and between (the "Assignor"), and (the "Assignee") (collectively the "Parties").

Semlux Technologies, Inc. (the "Assignor") having its primary place of business at 236 Davis Road, Bedford, MA 01730, is the owner of the U.S. Patent Number: 9,061,439 B2 dated June 23, 2015, titled "Recovery of Silicon from Kerf Silicon Waste" (the "Patent"). The inventors to the said Patent, Alleppey V. Hariharan, 3225 Summer Canyon Dr, Austin, TX 78732 (US) and Jagannathan Ravi, 236 Davis Road, Bedford, MA 01730 (US) (together the "Assignee") desire to acquire the entire right, title and interest in the said Patent.

**WHEREAS**, the Assignee wishes to acquire all right, title and interest in the said Patent, from the Assignor, and

**WHEREAS**, the Assignor wishes to transfer its entire right, title and interest in the said Patent to the Assignee,

**NOW THEREFORE**, the Assignor, as owner of the said Patent, hereby acknowledges, and assigns and transfers its entire right, title and interest in the said Patent to the said Assignee for the entire term of the Patent and any reissues or extensions, continuations in whole or part, or substitute applications filed claiming the benefit of the said Patent.

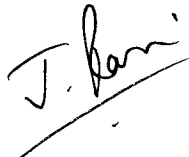
The right, title, and interest conveyed by this Assignment is to be held and utilized by the Assignee and Assignee's successors as fully and exclusively as it would have been held and utilized by the Assignor had this assignment not been made.

This Agreement shall be construed in accordance with, and governed in all respects by, the laws of the State of Massachusetts, without regard to conflicts of law principles.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be executed the day and year first above written.

### ASSIGNOR

Signature



Print Name

Jagannathan Ravi (for Semlux Technologies, Inc.)

Continued on Page 2

**ASSIGNEE**

Signature A. Hariharan

Alleppey V Hariharan

State of Texas  
County of Travis

Signature J. Ravi

Jagannathan Ravi

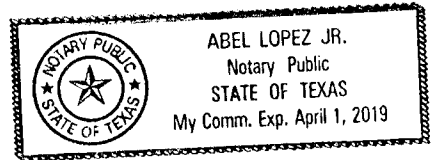
State of Massachusetts  
County of Middlesex

I, the undersigned, a Notary Public in and for Travis County, in the State of Texas, DO HEREBY CERTIFY THAT Alleppey V Hariharan is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person, and acknowledged that Alleppey V Hariharan signed, sealed and delivered the said instrument as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 13<sup>th</sup> day of April, 2018.

[Signature]  
Signature of Notary Public

Seal



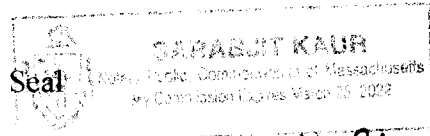
Abel Lopez Jr.  
Printed Name of Notary

My commission expires on April 1, 2019.

I, the undersigned, a Notary Public in and for Middlesex County, in the State of Massachusetts, DO HEREBY CERTIFY THAT Jagannathan Ravi is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person, and acknowledged that Jagannathan Ravi signed, sealed and delivered the said instrument as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 9<sup>th</sup> day of April, 2018.

x [Signature]  
Signature of Notary Public



SARABJIT KAUR  
Printed Name of Notary

Notarizing only signature for Jagannathan Ravi 4/9/18

My commission expires on 03/25, 2022.

US PATENT 9,061,439 B2

## ASSIGNMENT OF ISSUED PATENT

**THIS AGREEMENT** is made this 09 day of April, 2018, by and between (the "Assignor"), and (the "Assignee") (collectively the "Parties").

Semlux Technologies, Inc. (the "Assignor") having its primary place of business at 236 Davis Road, Bedford, MA 01730, is the owner of the U.S. Patent Number: 9,067,338 B2 dated June 30, 2015, titled "Method to Convert Waste Silicon to High Purity Silicon" (the "Patent"). The inventors to the said Patent, Alleppey V Hariharan, 3225 Summer Canyon Dr, Austin, TX 78732 (US) and Jagannathan Ravi, 236 Davis Road, Bedford, MA 01730 (US) (together the "Assignee") desire to acquire the entire right, title and interest in the said Patent.

**WHEREAS**, the Assignee wishes to acquire all right, title and interest in the said Patent, from the Assignor, and

**WHEREAS**, the Assignor wishes to transfer its entire right, title and interest in the said Patent to the Assignee,

**NOW THEREFORE**, the Assignor, as owner of the said Patent, hereby acknowledges, and assigns and transfers its entire right, title and interest in the said Patent to the said Assignee for the entire term of the Patent and any reissues or extensions, continuations in whole or part, or substitute applications filed claiming the benefit of the said Patent.

The right, title, and interest conveyed by this Assignment is to be held and utilized by the Assignee and Assignee's successors as fully and exclusively as it would have been held and utilized by the Assignor had this assignment not been made.

This Agreement shall be construed in accordance with, and governed in all respects by, the laws of the State of Massachusetts, without regard to conflicts of law principles.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be executed the day and year first above written.

### ASSIGNOR

Signature



Print Name

Jagannathan Ravi (for Semlux Technologies, Inc.)

Continued on Page 2

**ASSIGNEE**

Signature Alleppay V Hariharan

Alleppay V Hariharan

State of Texas  
County of Travis

Signature J. Ravi

Jagannathan Ravi

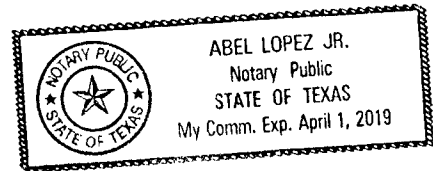
State of Massachusetts  
County of Middlesex

I, the undersigned, a Notary Public in and for Travis County, in the State of Texas, DO HEREBY CERTIFY THAT Alleppay V Hariharan is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person, and acknowledged that Alleppay V Hariharan signed, sealed and delivered the said instrument as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 13<sup>th</sup> day of April, 2018.

[Signature]  
Signature of Notary Public

Seal



Abel Lopez Jr.  
Printed Name of Notary

My commission expires on April 1, 2019.

I, the undersigned, a Notary Public in and for Middlesex County, in the State of Massachusetts, DO HEREBY CERTIFY THAT Jagannathan Ravi is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person, and acknowledged that Jagannathan Ravi signed, sealed and delivered the said instrument as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 09 day of April, 2018.

X [Signature]  
Signature of Notary Public

Seal



SARABJIT KAUR  
Printed Name of Notary

My commission expires on 03/25, 2022.

Notarizing only signature for Jagannathan Ravi 4/9/18

# ASSIGNMENT OF ISSUED PATENT

**THIS AGREEMENT** is made this 09 day of April, 2018, by and between (the "Assignor"), and (the "Assignee") (collectively the "Parties").

Semlux Technologies, Inc. (the "Assignor") having its primary place of business at 236 Davis Road, Bedford, MA 01730, is the owner of the U.S. Patent Number: 9,067,792 B1 dated June 30, 2015, titled "Laser Conversion of High Purity Silicon Powder to Densified Granular Forms" (the "Patent"). The inventors to the said Patent, Alleppey V Hariharan, 3225 Summer Canyon Dr, Austin, TX 78732 (US) and Jagannathan Ravi, 236 Davis Road, Bedford, MA 01730 (US) (together the "Assignee") desire to acquire the entire right, title and interest in the said Patent.

**WHEREAS**, the Assignee wishes to acquire all right, title and interest in the said Patent, from the Assignor, and

**WHEREAS**, the Assignor wishes to transfer its entire right, title and interest in the said Patent to the Assignee,

**NOW THEREFORE**, the Assignor, as owner of the said Patent, hereby acknowledges, and assigns and transfers its entire right, title and interest in the said Patent to the said Assignee for the entire term of the Patent and any reissues or extensions, continuations in whole or part, or substitute applications filed claiming the benefit of the said Patent.

The right, title, and interest conveyed by this Assignment is to be held and utilized by the Assignee and Assignee's successors as fully and exclusively as it would have been held and utilized by the Assignor had this assignment not been made.

This Agreement shall be construed in accordance with, and governed in all respects by, the laws of the State of Massachusetts, without regard to conflicts of law principles.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be executed the day and year first above written.

**ASSIGNOR**

Signature



Print Name

Jagannathan Ravi (for Semlux Technologies, Inc.)

Continued on Page 2

**ASSIGNEE**

Signature Alleppey V Hariharan

Alleppey V Hariharan

State of Texas  
County of Travis

Signature J. Ravi

Jagannathan Ravi

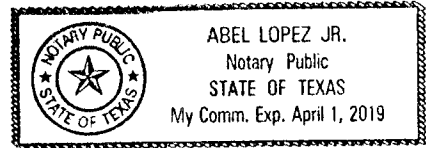
State of Massachusetts  
County of Middlesex

I, the undersigned, a Notary Public in and for Travis County, in the State of Texas, DO HEREBY CERTIFY THAT Alleppey V Hariharan is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person, and acknowledged that Alleppey V Hariharan signed, sealed and delivered the said instrument as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 13<sup>th</sup> day of April, 2018.

Abel Lopez Jr.  
Signature of Notary Public

Seal



Abel Lopez Jr.  
Printed Name of Notary

My commission expires on April 1, 2019.

I, the undersigned, a Notary Public in and for Middlesex County, in the State of Massachusetts, DO HEREBY CERTIFY THAT Jagannathan Ravi is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person, and acknowledged that Jagannathan Ravi signed, sealed and delivered the said instrument as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 09 day of April, 2018.

Sarabjit Kaur  
Signature of Notary Public

Seal

Notrizing only Signautre for Jagannathan Ravi 4/9/18

SARABJIT KAUR  
Printed Name of Notary

My commission expires on 03/25, 2022.

US PATENT 9,067,792 B1



## ASSIGNMENT OF ISSUED PATENT

**THIS AGREEMENT** is made this 09 day of April, 2018, by and between (the "Assignor"), and (the "Assignee") (collectively the "Parties").

Semlux Technologies, Inc. (the "Assignor") having its primary place of business at 236 Davis Road, Bedford, MA 01730, is the owner of the U.S. Patent Number: 9,206,508 B1 dated December 08, 2015, titled "Laser Assisted Chemical Vapor Deposition of Silicon" (the "Patent"). The inventors to the said Patent, Alleppey V Hariharan, 3225 Summer Canyon Dr, Austin, TX 78732 (US) and Jagannathan Ravi, 236 Davis Road, Bedford, MA 01730 (US) (together the "Assignee") desire to acquire the entire right, title and interest in the said Patent.

**WHEREAS**, the Assignee wishes to acquire all right, title and interest in the said Patent, from the Assignor, and

**WHEREAS**, the Assignor wishes to transfer its entire right, title and interest in the said Patent to the Assignee,

**NOW THEREFORE**, the Assignor, as owner of the said Patent, hereby acknowledges, and assigns and transfers its entire right, title and interest in the said Patent to the said Assignee for the entire term of the Patent and any reissues or extensions, continuations in whole or part, or substitute applications filed claiming the benefit of the said Patent.


The right, title, and interest conveyed by this Assignment is to be held and utilized by the Assignee and Assignee's successors as fully and exclusively as it would have been held and utilized by the Assignor had this assignment not been made.

This Agreement shall be construed in accordance with, and governed in all respects by, the laws of the State of Massachusetts, without regard to conflicts of law principles.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be executed the day and year first above written.

**ASSIGNOR**

Signature



Print Name

Jagannathan Ravi (for Semlux Technologies, Inc.)

Continued on Page 2

**ASSIGNEE**

Signature *Alleppey V Hariharan*

Alleppey V Hariharan

State of Texas  
County of Travis

Signature *J. Ravi*

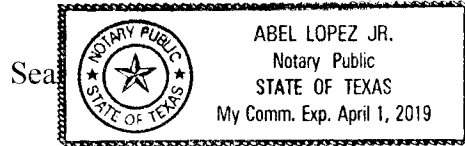
Jagannathan Ravi

State of Massachusetts  
County of Middlesex

I, the undersigned, a Notary Public in and for Travis County, in the State of Texas, DO HEREBY CERTIFY THAT Alleppey V Hariharan is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person, and acknowledged that Alleppey V Hariharan signed, sealed and delivered the said instrument as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 13<sup>th</sup> day of April, 2018.

*Abel Lopez Jr.*  
Signature of Notary Public



Abel Lopez Jr.  
Printed Name of Notary

My commission expires on April 1, 2019.

I, the undersigned, a Notary Public in and for Middlesex County, in the State of Massachusetts, DO HEREBY CERTIFY THAT Jagannathan Ravi is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person, and acknowledged that Jagannathan Ravi signed, sealed and delivered the said instrument as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this 09 day of April, 2018.

x *Sarabjit Kaur*  
Signature of Notary Public



SARABJIT Kaur  
Printed Name of Notary

*Notarizing only Signature for Jagannathan Ravi 4/9/18*

My commission expires on 03 / 25, 2022.

US PATENT 9,206,508 B1