

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4121193

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
WILLIAM KAI LANGFORD	05/09/2016
AMANDA GHASSAEI	05/09/2016
NEIL GERSHENFELD	05/09/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MASSACHUSETTS INSTITUTE OF TECHNOLOGY
<b>Street Address:</b>	77 MASSACHUSETTS AVENUE
<b>City:</b>	CAMBRIDGE
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	02139
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15338960
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(312)551-9501
<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>	312-551-9500
<b>Email:</b>	jcd@fg-law.com
<b>Correspondent Name:</b>	JOSEPH DRISH
<b>Address Line 1:</b>	333 N. MICHIGAN AVENUE
<b>Address Line 2:</b>	27TH FLOOR
<b>Address Line 4:</b>	CHICAGO, ILLINOIS 60601
<b>ATTORNEY DOCKET NUMBER:</b>	MIT-02-DIV
<b>NAME OF SUBMITTER:</b>	JOSEPH C. DRISH
<b>SIGNATURE:</b>	/Joseph C. Drish/
<b>DATE SIGNED:</b>	10/31/2016
This document serves as an Oath/Declaration (37 CFR 1.63).	
<b>Total Attachments: 11</b>	
source=MIT-02-DIV-Dec-Assigns#page1.tif	
source=MIT-02-DIV-Dec-Assigns#page2.tif	

source=MIT-02-DIV-Dec-Assigns#page3.tif  
source=MIT-02-DIV-Dec-Assigns#page4.tif  
source=MIT-02-DIV-Dec-Assigns#page5.tif  
source=MIT-02-DIV-Dec-Assigns#page6.tif  
source=MIT-02-DIV-Dec-Assigns#page7.tif  
source=MIT-02-DIV-Dec-Assigns#page8.tif  
source=MIT-02-DIV-Dec-Assigns#page9.tif  
source=MIT-02-DIV-Dec-Assigns#page10.tif  
source=MIT-02-DIV-Dec-Assigns#page11.tif

**RECORDATION FORM COVER SHEET  
PATENTS ONLY**

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of conveying party(ies)**

William Kai Langford

Additional name(s) of conveying party(ies) attached?  Yes  No

**2. Name and address of receiving party(ies)**

Name: Massachusetts Institute of Technology

Internal Address: \_\_\_\_\_

Street Address: 77 Massachusetts Avenue

City: Cambridge

State: MA

Country: USA Zip: 02139

Additional name(s) & address(es) attached?  Yes  No

**3. Nature of conveyance/Execution Date(s):**

Execution Date(s) 05-09-2016

- Assignment  Merger
- Security Agreement  Change of Name
- Joint Research Agreement
- Government Interest Assignment
- Executive Order 9424, Confirmatory License
- Other \_\_\_\_\_

**4. Application or patent number(s):**

This document serves as an Oath/Declaration (37 CFR 1.63).

A. Patent Application No. (s)

B. Patent No (s)

15/338,960

Additional numbers attached?  Yes  No

**5. Name and address to whom correspondence concerning document should be mailed:**

Name: Joseph C. Drish

Internal Address: 27th Floor

Street Address: 333 N. Michigan Ave.

City: Chicago

State: IL Zip: 60601

Phone Number: 312-551-9500

Docket Number: MIT-02-DIV

Email Address: jcd@fg-law.com

**6. Total number of applications and patents involved: 1**

**7. Total fee (37 CFR 1.21(h) & 3.41) \$**

- Authorized to be charged to deposit account
- Enclosed
- None required (government interest not affecting title)

**8. Payment Information**

Deposit Account Number 50-5145

Authorized User Name Robert P. Greenspoon

**9. Signature:** /Joseph C. Drish/

10-31-2016

Signature

Date

Joseph C. Drish

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

**11**

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

ADDITIONAL CONVEYING PARTIES: Amanda Ghassaei

Neil Gershenfeld

## DECLARATION AND ASSIGNMENT OF PATENT APPLICATION

As a below named inventor, I hereby submit this combined Declaration and Assignment of Patent Application.

### DECLARATION OF WILLIAM KAI LANGFORD

I, William Kai Langford, being a resident of the United States of America, having an address at 129 Franklin St., apt. 119, Cambridge, Massachusetts 02139, hereby declare as follows. This declaration is directed to United States Application No. 15/034,974, filed on May 6, 2016, entitled Self-Assembling Assemblers (the "Application"). 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 a "person may not execute an oath or declaration unless the person has reviewed and understands the contents of the application, including the claims, and is aware of the duty to disclose to the Office all information known to be material to patentability as defined in § 1.56," and state that I have complied with these requirements.

I hereby acknowledge that any willful false statement made in this Declaration is punishable by fine or imprisonment of not more than five (5) years, or both.

I hereby authorize and request the attorneys of record in the Application to insert in this Declaration and Assignment of Patent Application the filing date and serial number of the Application when officially known, and if needed the date of execution of this Declaration and Assignment.

### ASSIGNMENT

WHEREAS, I:

William Kai Langford, being a citizen and resident of the United States of America, having an address at 129 Franklin St., apt. 119, Cambridge, Massachusetts 02139 have made new and useful processes, machines, articles of manufacture, compositions of matter, ornamental designs and/or improvements in the Application, said Application being filed with this Assignment.

WHEREAS, Massachusetts Institute of Technology, having a place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139 and who, together with its successors and assigns ("Assignee"), is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited.

NOW, THEREFORE, for valuable consideration furnished by Assignee to me, receipt and sufficiency of which I hereby acknowledge, I hereby, without reservations:

1. Assign, transfer, and convey to Assignee the entire right, title, and interest in and to the Application, the inventions and discoveries described in the Application, any and all other applications for Patents on said inventions and discoveries in other countries, including all divisional, renewal, substitute, continuation, continuation-in-part and Convention applications based in whole or in part upon said inventions or discoveries and any and all Patents, reissues, and extensions of Patents granted for said inventions and discoveries, and every priority right that is or may be predicated upon or arise from said inventions and discoveries, from the Application.

2. Authorize Assignee to file patent applications in any or all countries for any or all said inventions and discoveries from the Application in my name or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise.

3. Authorize and request the Commissioner for Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all rights in the Application and Patents issuing therefrom to Assignee, as assignee of the entire right, title, and interest therein or otherwise as Assignee may direct.

4. Warrant that I have not knowingly conveyed to others any right in said inventions and discoveries or any license to use the same or to make, use, or sell anything embodying or utilizing any of said inventions or discoveries; and that I have good right to assign the same to Assignee without encumbrance.

5. Bind my heirs, legal representatives, and assigns, as well as myself, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to me or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications, and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by me, my heirs, legal representatives, and assigns if this assignment had not been made; and particularly to execute and deliver the Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to me relating to said inventions and discoveries or the history thereof; to furnish Assignee with any and all documents, photographs, models, samples, and other physical exhibits in my control or in the control of my heirs, legal representatives, or assigns which may be useful or establishing the facts of our conception, disclosures, and reduction to practice of said inventions and discoveries; and to testify to the same in any interference, other litigation, or proceeding related hereto.

6. The assignment expressly includes the conveyance to Assignee of the right to bring suit for and to collect damages for any infringement of a patent issuing from the Application, and for a reasonable royalty for any use of 35 USC § 154(d) provisional rights, and for any other cause of action arising from Assignee's ownership of a patent issuing from the Application including any violation by others of any federal or state tort

or antitrust or unfair competition laws, and in and to any and all reissues, reexaminations and extensions of a Patent from the Application, these rights to be held and enjoyed by Assignee, for its own use and benefit and the use or benefit of its successors and assigns, to the end of the full term of the Patent from the Application, as fully and entirely as the same would have been held and enjoyed by me, had this sale and assignment not been made.

LEGAL NAME OF INVENTOR

Inventor: William Kai Langford

Date: May 9, 2016

Signature:  \_\_\_\_\_

## DECLARATION AND ASSIGNMENT OF PATENT APPLICATION

As a below named inventor, I hereby submit this combined Declaration and Assignment of Patent Application.

### DECLARATION OF AMANDA GHASSAEI

I, Amanda Ghassaei, being a resident of the United States of America, having an address at 41 Tremont St., Cambridge, Massachusetts 02139, hereby declare as follows. This declaration is directed to United States Application No. 15/034,974, filed on May 6, 2016, entitled **Self-Assembling Assemblers** (the "Application"). 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 a "person may not execute an oath or declaration unless the person has reviewed and understands the contents of the application, including the claims, and is aware of the duty to disclose to the Office all information known to be material to patentability as defined in § 1.56," and state that I have complied with these requirements.

I hereby acknowledge that any willful false statement made in this Declaration is punishable by fine or imprisonment of not more than five (5) years, or both.

I hereby authorize and request the attorneys of record in the Application to insert in this Declaration and Assignment of Patent Application the filing date and serial number of the Application when officially known, and if needed the date of execution of this Declaration and Assignment.

### ASSIGNMENT

WHEREAS, I:

Amanda Ghassaei, being a citizen and resident of the United States of America, having an address at 41 Tremont St., Cambridge, Massachusetts 02139 have made new and useful processes, machines, articles of manufacture, compositions of matter, ornamental designs and/or improvements in the Application, said Application being filed with this Assignment.

WHEREAS, **Massachusetts Institute of Technology**, having a place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139 and who, together with its successors and assigns ("Assignee"), is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited.

NOW, THEREFORE, for valuable consideration furnished by Assignee to me, receipt and sufficiency of which I hereby acknowledge, I hereby, without reservations:



1. Assign, transfer, and convey to Assignee the entire right, title, and interest in and to the Application, the inventions and discoveries described in the Application, any and all other applications for Patents on said inventions and discoveries in other countries, including all divisional, renewal, substitute, continuation, continuation-in-part and Convention applications based in whole or in part upon said inventions or discoveries and any and all Patents, reissues, and extensions of Patents granted for said inventions and discoveries, and every priority right that is or may be predicated upon or arise from said inventions and discoveries, from the Application.

2. Authorize Assignee to file patent applications in any or all countries for any or all said inventions and discoveries from the Application in my name or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise.

3. Authorize and request the Commissioner for Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all rights in the Application and Patents issuing therefrom to Assignee, as assignee of the entire right, title, and interest therein or otherwise as Assignee may direct.

4. Warrant that I have not knowingly conveyed to others any right in said inventions and discoveries or any license to use the same or to make, use, or sell anything embodying or utilizing any of said inventions or discoveries; and that I have good right to assign the same to Assignee without encumbrance.

5. Bind my heirs, legal representatives, and assigns, as well as myself, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to me or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications, and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by me, my heirs, legal representatives, and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to me relating to said inventions and discoveries or the history thereof; to furnish Assignee with any and all documents, photographs, models, samples, and other physical exhibits in my control or in the control of my heirs, legal representatives, or assigns which may be useful or establishing the facts of our conception, disclosures, and reduction to practice of said inventions and discoveries; and to testify to the same in any interference, other litigation, or proceeding related hereto.

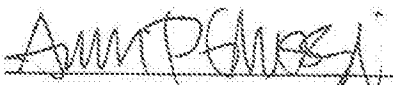
6. The assignment expressly includes the conveyance to Assignee of the right to bring suit for and to collect damages for any infringement of a patent issuing from the Application, and for a reasonable royalty for any use of 35 USC § 154(d) provisional rights, and for any other cause of action arising from Assignee's ownership of a patent issuing from the Application including any violation by others of any federal or state tort or antitrust or unfair competition laws, and in and to any and all reissues, reexaminations

and extensions of a Patent from the Application, these rights to be held and enjoyed by Assignee, for its own use and benefit and the use or benefit of its successors and assigns, to the end of the full term of the Patent from the Application, as fully and entirely as the same would have been held and enjoyed by me, had this sale and assignment not been made.

LEGAL NAME OF INVENTOR

Inventor: Amanda Ghassaei

Date: May 9, 2016

Signature: 

## DECLARATION AND ASSIGNMENT OF PATENT APPLICATION

As a below named inventor, I hereby submit this combined Declaration and Assignment of Patent Application.

### DECLARATION OF NEIL GERSHENFELD

I, Neil Gershenfeld, being a resident of the United States of America, having an address at 50 Orchard St., Cambridge, Massachusetts 02140, hereby declare as follows. This declaration is directed to United States Application No. 15/034,974, filed on May 6, 2016, entitled Self-Assembling Assemblers (the "Application"). 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 a "person may not execute an oath or declaration unless the person has reviewed and understands the contents of the application, including the claims, and is aware of the duty to disclose to the Office all information known to be material to patentability as defined in § 1.56," and state that I have complied with these requirements.

I hereby acknowledge that any willful false statement made in this Declaration is punishable by fine or imprisonment of not more than five (5) years, or both.

I hereby authorize and request the attorneys of record in the Application to insert in this Declaration and Assignment of Patent Application the filing date and serial number of the Application when officially known, and if needed the date of execution of this Declaration and Assignment.

### ASSIGNMENT

WHEREAS, I

Neil Gershenfeld, being a citizen and resident of the United States of America, having an address at 50 Orchard St., Cambridge, Massachusetts 02140 have made new and useful processes, machines, articles of manufacture, compositions of matter, ornamental designs and/or improvements in the Application, said Application being filed with this Assignment.

WHEREAS, Massachusetts Institute of Technology, having a place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139 and who, together with its successors and assigns ("Assignee"), is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited.

NOW, THEREFORE, for valuable consideration furnished by Assignee to me, receipt and sufficiency of which I hereby acknowledge, I hereby, without reservations:

1. Assign, transfer, and convey to Assignee the entire right, title, and interest in and to the Application, the inventions and discoveries described in the Application, any and all other applications for Patents on said inventions and discoveries in other countries, including all divisional, renewal, substitute, continuation, continuation-in-part and Convention applications based in whole or in part upon said inventions or discoveries and any and all Patents, reissues, and extensions of Patents granted for said inventions and discoveries, and every priority right that is or may be predicated upon or arise from said inventions and discoveries, from the Application.

2. Authorize Assignee to file patent applications in any or all countries for any or all said inventions and discoveries from the Application in my name or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise.

3. Authorize and request the Commissioner for Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all rights in the Application and Patents issuing therefrom to Assignee, as assignee of the entire right, title, and interest therein or otherwise as Assignee may direct.

4. Warrant that I have not knowingly conveyed to others any right in said inventions and discoveries or any license to use the same or to make, use, or sell anything embodying or utilizing any of said inventions or discoveries; and that I have good right to assign the same to Assignee without encumbrance.

5. Bind my heirs, legal representatives, and assigns, as well as myself, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to me or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications, and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by me, my heirs, legal representatives, and assigns if this assignment had not been made; and particularly to execute and deliver the Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to me relating to said inventions and discoveries or the history thereof; to furnish Assignee with any and all documents, photographs, models, samples, and other physical exhibits in my control or in the control of my heirs, legal representatives, or assigns which may be useful or establishing the facts of our conception, disclosures, and reduction to practice of said inventions and discoveries; and to testify to the same in any interference, other litigation, or proceeding related hereto.

6. The assignment expressly includes the conveyance to Assignee of the right to bring suit for and to collect damages for any infringement of a patent issuing from the Application, and for a reasonable royalty for any use of 35 USC § 154(d) provisional rights, and for any other cause of action arising from Assignee's ownership of a patent issuing from the Application including any violation by others of any federal or state tort or antitrust or unfair competition laws, and in and to any and all reissues, reexaminations

and extensions of a Patent from the Application, these rights to be held and enjoyed by Assignee, for its own use and benefit and the use or benefit of its successors and assigns, to the end of the full term of the Patent from the Application, as fully and entirely as the same would have been held and enjoyed by me, had this sale and assignment not been made.

LEGAL NAME OF INVENTOR

Inventor: Neil Gershenfeld

Date: May 9, 2016

Signature: 