

## PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT4906197

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| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT   |
| <b>NATURE OF CONVEYANCE:</b>  | ASSIGNMENT   |
| <b>CONVEYING PARTY DATA</b>   |  |
|   |  |
| <b>Name</b>   | <b>Execution Date</b>  |
| ELLIOT W. HAWKES  | 04/02/2018   |
| ALLISON M. OKAMURA  | 04/02/2018   |
| JOSEPH D. GREER   | 04/02/2018   |
| LAURA H. BLUMENSCHNEIN  | 04/02/2018   |
| <b>RECEIVING PARTY DATA</b>   |  |
| <b>Name:</b>  | THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY |
| <b>Street Address:</b>  | 3000 EL CAMINO REAL, BUILDING FIVE, THIRD FLOOR                |
| <b>City:</b>  | PALO ALTO  |
| <b>State/Country:</b>   | CALIFORNIA   |
| <b>Postal Code:</b>   | 94306  |
| <b>PROPERTY NUMBERS Total: 1</b>  |  |
|   |  |
| <b>Property Type</b>  | <b>Number</b>  |
| <b>Application Number:</b>  | 15943329   |
| <b>CORRESPONDENCE DATA</b>  |  |
| <b>Fax Number:</b>  | (650)424-0141  |
| <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>   | 650-331-8411   |
| <b>Email:</b>   | ron@lumen.com  |
| <b>Correspondent Name:</b>  | RON JACOBS   |
| <b>Address Line 1:</b>  | 438 CAMBRIDGE AVE.   |
| <b>Address Line 2:</b>  | SUITE 225  |
| <b>Address Line 4:</b>  | PALO ALTO, CALIFORNIA 94306                                    |
| <b>ATTORNEY DOCKET NUMBER:</b>  | S15-383/US   |
| <b>NAME OF SUBMITTER:</b>   | RON JACOBS   |
| <b>SIGNATURE:</b>   | /Ron Jacobs/   |
| <b>DATE SIGNED:</b>   | 04/09/2018   |
| <b>Total Attachments: 4</b>   |  |
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source=S15-383-Assgn#page4.tif

## ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of **April 2, 2018**, by and between **Elliot W. Hawkes**, an individual residing in **Santa Barbara, CA, US**, (the "Assignor") and **The Board of Trustees of the Leland Stanford Junior University**, an entity whose address is **3000 El Camino Real, Building Five, Third Floor, Palo Alto, CA 94306, USA** (the "Assignee").

1) For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee and the successors, assigns, and legal representatives of Assignee, all of its right, title and interest in and to (i) the invention or inventions described in US patent application **15/943329** filed **4/2/2018** entitled **Robotic Mobility and Construction by Growth** (the "Application") naming Assignor as an inventor, (ii) any and all patent applications (whether provisional or non-provisional) relating to said invention(s), including all continuations, continuations-in-part, divisions, substitutes, reissues or renewals thereof, in any and all countries, (iii) any and all patents relating to such invention(s) in any and all countries that may be granted on any such application(s), including all reissues or extensions of any such patents and (iv) any and all domestic and foreign rights of priority resulting from the filing of the Application.

2) Assignor hereby agrees that no assignment, sale, agreement or encumbrance has been or will be made or entered into by Assignor which would conflict with this Assignment. Assignor represents and warrants to Assignee that at the time of the execution and delivery of this Assignment, Assignor solely owns (or jointly owns, if the invention(s) were jointly made) the entire right, title and interest in and to said invention(s).

3) Assignor agrees that Assignee may apply for foreign patents relating to said invention(s) and irrevocably authorizes Assignee and grants Assignee the right to do so.

4) Assignor agrees, on request and without further consideration, but at the expense of Assignee, to sign all lawful papers, make all rightful oaths, and give any required testimony in any legal proceedings relating to said invention(s), and to generally aid Assignee, or its successors or assigns to obtain and enforce patent protection for said invention(s) in any and all countries.

5) Assignor authorizes and requests any official whose duty it is to issue patents to issue any patent on said invention(s) to Assignee, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made.

6) This Assignment shall bind and inure to the benefit of the successors, assigns and personal representatives of the respective parties.

Assignor has executed this Assignment as of the Effective Date of **April 2, 2018**.

Signature:   
Assignor: **Elliot W. Hawkes**

Lumen Ref.: S15-383/US  
PID: 23424 IID: 5324

## ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of **April 2, 2018**, by and between **Allison M. Okamura**, an individual residing in **Mountain View, CA, US**, (the "Assignor") and **The Board of Trustees of the Leland Stanford Junior University**, an entity whose address is **3000 El Camino Real, Building Five, Third Floor, Palo Alto, CA 94306, USA** (the "Assignee").

1) For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee and the successors, assigns, and legal representatives of Assignee, all of its right, title and interest in and to (i) the invention or inventions described in US patent application **15/943329** filed **4/2/2018** entitled **Robotic Mobility and Construction by Growth** (the "Application") naming Assignor as an inventor, (ii) any and all patent applications (whether provisional or non-provisional) relating to said invention(s), including all continuations, continuations-in-part, divisions, substitutes, reissues or renewals thereof, in any and all countries, (iii) any and all patents relating to such invention(s) in any and all countries that may be granted on any such application(s), including all reissues or extensions of any such patents and (iv) any and all domestic and foreign rights of priority resulting from the filing of the Application.

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Assignor has executed this Assignment as of the Effective Date of **April 2, 2018**.

Signature:   
Assignor: **Allison M. Okamura**

Lumen Ref.: S15-383/US  
PID: 23424 IID: 4991

## ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of **April 2, 2018**, by and between **Joseph D. Greer**, an individual residing in **Portland, OR, US**, (the "Assignor") and **The Board of Trustees of the Leland Stanford Junior University**, an entity whose address is **3000 El Camino Real, Building Five, Third Floor, Palo Alto, CA 94306, USA** (the "Assignee").

1) For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee and the successors, assigns, and legal representatives of Assignee, all of its right, title and interest in and to (i) the invention or inventions described in US patent application **15/943329** filed **4/2/2018** entitled **Robotic Mobility and Construction by Growth** (the "Application") naming Assignor as an inventor, (ii) any and all patent applications (whether provisional or non-provisional) relating to said invention(s), including all continuations, continuations-in-part, divisions, substitutes, reissues or renewals thereof, in any and all countries, (iii) any and all patents relating to such invention(s) in any and all countries that may be granted on any such application(s), including all reissues or extensions of any such patents and (iv) any and all domestic and foreign rights of priority resulting from the filing of the Application.

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6) This Assignment shall bind and inure to the benefit of the successors, assigns and personal representatives of the respective parties.

Assignor has executed this Assignment as of the Effective Date of **April 2, 2018**.

Signature:   
Assignor: **Joseph D. Greer**

Lumen Ref.: S15-383/US  
PID: 23424 IID: 6521

## ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of **April 2, 2018**, by and between **Laura H. Blumenschein**, an individual residing in **Palo Alto, CA, US**, (the "Assignor") and **The Board of Trustees of the Leland Stanford Junior University**, an entity whose address is **3000 El Camino Real, Building Five, Third Floor, Palo Alto, CA 94306, USA** (the "Assignee").

1) For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee and the successors, assigns, and legal representatives of Assignee, all of its right, title and interest in and to (i) the invention or inventions described in US patent application **15/943329** filed **4/2/2018** entitled **Robotic Mobility and Construction by Growth** (the "Application") naming Assignor as an inventor, (ii) any and all patent applications (whether provisional or non-provisional) relating to said invention(s), including all continuations, continuations-in-part, divisions, substitutes, reissues or renewals thereof, in any and all countries, (iii) any and all patents relating to such invention(s) in any and all countries that may be granted on any such application(s), including all reissues or extensions of any such patents and (iv) any and all domestic and foreign rights of priority resulting from the filing of the Application.

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6) This Assignment shall bind and inure to the benefit of the successors, assigns and personal representatives of the respective parties.

Assignor has executed this Assignment as of the Effective Date of **April 2, 2018**.

Signature:   
Assignor: **Laura H. Blumenschein**

Lumen Ref.: S15-383/US  
PID: 23424 IID: 6522