**PATENT ASSIGNMENT COVER SHEET**

**SUBMISSION TYPE:** NEW ASSIGNMENT

**NATURE OF CONVEYANCE:** ASSIGNMENT

### CONVEYING PARTY DATA

<table>
<thead>
<tr>
<th>Name</th>
<th>Execution Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARSHALL MEDOFF</td>
<td>09/03/2013</td>
</tr>
<tr>
<td>THOMAS CRAIG MASTERMAN</td>
<td>09/03/2013</td>
</tr>
<tr>
<td>ROBERT PARADIS</td>
<td>08/28/2013</td>
</tr>
<tr>
<td>JAEWOONG MOON</td>
<td>08/08/2013</td>
</tr>
<tr>
<td>JIHAN KHAN</td>
<td>08/08/2013</td>
</tr>
<tr>
<td>ANDREW PAPOULIS</td>
<td>08/14/2013</td>
</tr>
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### RECEIVING PARTY DATA

<table>
<thead>
<tr>
<th>Name</th>
<th>XYLECO, INC.</th>
</tr>
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<tbody>
<tr>
<td>Street Address</td>
<td>360 AUDUBON ROAD</td>
</tr>
<tr>
<td>City</td>
<td>WAKEFIELD</td>
</tr>
<tr>
<td>State/Country</td>
<td>MASSACHUSETTS</td>
</tr>
<tr>
<td>Postal Code</td>
<td>01880</td>
</tr>
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**PROPERTY NUMBERS Total: 1**

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<tr>
<th>Property Type</th>
<th>Number</th>
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<tbody>
<tr>
<td>Application Number</td>
<td>14786388</td>
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**CORRESPONDENCE DATA**

Fax Number: (617)526-5000

*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.*

Phone: 6175266000

Email: WHIPDocketStaff@wilmerhale.com

Correspondent Name: WILMERHALE

Address Line 1: 60 STATE STREET

Address Line 4: BOSTON, MASSACHUSETTS 02109

**ATTORNEY DOCKET NUMBER:** 2209787.143 US2

**NAME OF SUBMITTER:** MICHAEL E. CONNORS

**SIGNATURE:** /Michael E. Connors/

**DATE SIGNED:** 02/24/2016

Total Attachments: 5
ASSIGNMENT

WHEREAS, we, Marshall Medoff, Thomas Craig Masterman, Robert Paradis, Jaewoong Moon, Jihan Khan and Andrew Papoulis have invented a certain improvement in PROCESSING BIOMASS described in a Provisional Patent Application, the specification of which:

[X] was filed on April 26, 2013, as Provisional App No. 61/816,664 (Attorney Docket No. 00173-P1US)

WHEREAS, Xyleco, Inc. (hereinafter “ASSIGNEE”), a corporation organized and existing under the laws of Delaware and having a usual place of business at 271 Salem Street, Unit L, Woburn, Massachusetts 01801, desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest, including the right to sue for past infringement, in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said Provisional application, together with the entire right, title and interest in and to said Provisional application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by me had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, including the right to claim priority to said Provisional application; and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the application number and filing date of said application when known. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE’s selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their own expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements

PATENT
REEL: 037811 FRAME: 0038
and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States of America to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, it successors, assigns, and legal representatives.

Date: 9/3/13

Name of Inventor: Marshall Medoff
Address of Inventor: 90 Addington Road
Brookline, MA 02445, US

State of Massachusetts
County of Norfolk

Subscribed and sworn to before me by the above-named

on September 3, 200—

date

Notary Public

My Commission Expires: March 17, 2017
Inventors: Marshall Medoff, Thomas Craig Masterman, Robert Paradis, Jaewoong Moon, Jihan Khan and Andrew Pappoulis
Filed: April 26, 2013
Assignment
Page 3

Date: 9/3/13

Name of Inventor: Thomas Craig Masterman
Address of Inventor: 26 Linden Street
Brookline, MA 02445, US

State of Massachusetts  )
County of Middlesex  ) ss.

Subscribed and sworn to before me by the above-named Thomas Craig Masterman
on September 5, 2013

Notary Public
My Commission Expires: March 17, 2012

(Date)

(Seal)

Date: 8/28/13

Name of Inventor: Robert Paradis
Address of Inventor: 32 Burlington Mall Road
Burlington, MA 01803

State of Massachusetts  )
County of Middlesex  ) ss.

Subscribed and sworn to before me by the above-named Robert Paradis
on August 28, 2013

Notary Public
My Commission Expires: March 17, 2012

(Date)

(Seal)
February 28, 2013

Date: 8/8/2013

Name of Inventor: Jaewoong Moon
Address of Inventor: 600 Bullfinch Drive #104
Andover, MA 01810

State of Massachusetts
County of Middlesex

Subscribed and sworn to before me by the above-named Jaewoong Moon
on August 8, 2013.

Notary Public Joyce C. Hersh
My Commission Expires: March 19, 2017

Date: August 8, 2013

Name of Inventor: Jihan Khan
Address of Inventor: 1 Warwick Park #2
Cambridge, MA 02140

State of Massachusetts
County of Middlesex

Subscribed and sworn to before me by the above-named Jihan Khan
on August 8, 2013.

Notary Public Joyce C. Hersh
My Commission Expires: March 19, 2017
Date: 8/14/2013

Name of Inventor: Andrew Papoulis
Address of Inventor: 186 Turnpike Street
Canton, MA 02021

State of Massachusetts
County of Middlesex

Subscribed and sworn to before me by the above-named Andrew Papoulis on August 14, 2013.

Notary Public Joyce C. Hersh
My Commission Expires: March 12, 2017