

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT								
NATURE OF CONVEYANCE:	ASSIGNMENT								
CONVEYING PARTY DATA									
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Ravi CHANDRAN</td> <td>01/15/2013</td> </tr> <tr> <td>Daniel Michael LEO</td> <td>01/15/2013</td> </tr> <tr> <td>Shawn Robert FREITAS</td> <td>01/15/2013</td> </tr> </tbody> </table>		Name	Execution Date	Ravi CHANDRAN	01/15/2013	Daniel Michael LEO	01/15/2013	Shawn Robert FREITAS	01/15/2013
Name	Execution Date								
Ravi CHANDRAN	01/15/2013								
Daniel Michael LEO	01/15/2013								
Shawn Robert FREITAS	01/15/2013								
RECEIVING PARTY DATA									
Name:	THERMOCHEM RECOVERY INTERNATIONAL, INC.								
Street Address:	3700 KOPPERS STREET								
City:	BALTIMORE								
State/Country:	MARYLAND								
Postal Code:	21227								
PROPERTY NUMBERS Total: 1									
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>PCT Number:</td> <td>US2013022520</td> </tr> </tbody> </table>		Property Type	Number	PCT Number:	US2013022520				
Property Type	Number								
PCT Number:	US2013022520								
CORRESPONDENCE DATA									
Fax Number:	4048887490								
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>									
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ATTORNEY DOCKET NUMBER:	T127 1070WO								
NAME OF SUBMITTER:	Nanda K. Alapati								
Total Attachments: 3 source=T127_1070WO_Assignment_of_International_Application#page1.tif source=T127_1070WO_Assignment_of_International_Application#page2.tif source=T127_1070WO_Assignment_of_International_Application#page3.tif									

CH \$40.00 US2013022520

ASSIGNMENT OF INTERNATIONAL APPLICATION

WHEREAS, as a below named inventor, I, ASSIGNOR, am the original, first and sole (if only one inventor is named) or joint (if more than one inventor is named) inventor, of the invention entitled:

Integrated Two-Stage Thermochemical Heat Pipe Reactor Having a Partitioned Vessel

which is:

- identified as WCSR Docket No. T127 1070WO
- was filed on January 22, 2013 as PCT International Application No. PCT/US2013/022520

WHEREAS, **ThermoChem Recovery, International**, having a business address at 3700 Koppers Street, Baltimore, MD 21227, United States of America, ASSIGNEE, is desirous of obtaining the entire right, title and interest in, to and under the said invention and said International Application.

NOW, THEREFORE, in consideration of good and valuable consideration the receipt of which is hereby acknowledged, Assignor has sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the ASSIGNEE, his successors, legal representatives and assigns, the entire right, title and interest in, to and under:

- (a) Said invention;
- (b) Said International Application;
- (c) All National Phase applications based on the International Application, together with the right to file such applications and the right to claim priority rights for same which rights arise under the Laws of any PCT member state, the International Convention for the Protection of Industrial Property, or any other international agreement in which any such application is filed, as may be applicable;
- (d) All applications for industrial property protection, including without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention;
- (e) All forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention; and

(f) All divisionals, continuations, reissues, renewals and extensions of any of the foregoing.

AND ASSIGNOR HEREBY authorizes and requests any Official of any PCT member state, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue any such patent or other evidence or form of industrial property protection to the said ASSIGNEE, his successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND ASSIGNOR HEREBY covenants and agrees that it has full right to convey the entire interest herein assigned, and that Assignor has not executed, and will not execute, any agreement in conflict herewith.

AND ASSIGNOR HEREBY further covenants and agrees that it will communicate to the said ASSIGNEE, his successors, legal representatives and assigns, any facts known to it respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, his successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

AND ASSIGNOR HEREBY grant(s) an authorized representative of Assignee the power to insert in this Assignment the application number and filing date and further identification that may be necessary or desirable to comply with the rules for recordation of this Assignment.

IN WITNESS WHEREOF, the undersigned inventor has affixed his signature.



1/15/2013

1.

Name: **Ravi CHANDRAN**
Residence Address: Ellicott City, MD 21042
Post Office Address: 3915 Paul Mill Road, Ellicott City, MD 21042
Citizenship: USA

Date



Witness

1/15/2013
Date



Witness

1/15/2013
Date

2. Daniel M Leo

1 / 15 / 2013
Date

Name: Daniel Michael LEO

Residence Address: Baltimore, MD

Post Office Address: 1014 N Calvert St, #3, Baltimore, MD 21202

Citizenship: USA

[Signature]
Witness

1/15/2013
Date

[Signature]
Witness

1/15/2013
Date

3. SRF

01-15-13
Date

Name: Shawn Robert FREITAS

Residence Address: Corvallis, OR

Post Office Address: 2942 NW 13th Pl, Corvallis, OR 97330

Citizenship: USA

Daniel M. Leo
Witness

1 / 15 / 2013
Date

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Witness

1/15/2013
Date