PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------|----------------|
| Ravi Chandran | 04/24/2006 |

RECEIVING PARTY DATA

| Name: | Thermochem Recovery International, Inc. |
|-----------------|---|
| Street Address: | 3700 Koppers Street, Suite 405 |
| City: | Baltimore |
| State/Country: | MARYLAND |
| Postal Code: | 21227 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 11409837 |

CORRESPONDENCE DATA

Fax Number: (703)918-2265

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

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Correspondent Name: Nanda K. Alapati

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Address Line 2: Womble Carlyle Sandridge & Rice Address Line 4: Atlanta, GEORGIA 30357-0037

NAME OF SUBMITTER: Nanda K. Alapati

Total Attachments: 2

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PATENT REEL: 018056 FRAME: 0916

ASSIGNMENT

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:

Fluid Bed Reactor Having Vertically Spaced Apart Clusters of Heating Conduits

| which | is: |
|-------------|--|
| | is attached hereto; |
| \boxtimes | identified as WCSR Docket No. T127 1030.1; |
| | was filed on 24 Apr 2006 as United States Application Serial No. 11/409,837 |
| | was filed on as PCT International Application No and designated the United States. |
| | WHEREAS, <u>Thermochem Recovery International, Inc.</u> , having a business address at Koppers Street, Suite 405, Baltimore, MD 21227, ASSIGNEE, is desirous of obtaining the right, title and interest in, to and under the said invention and said application in the United |

NOW, THEREFORE, in consideration of good and valuable consideration, 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 said invention and the United States application and all divisionals, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and 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 in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND ASSIGNOR HEREBY authorizes and requests the Commissioner of Patents and Trademarks of the United States and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue said application to the said ASSIGNEE, his successors, legal representatives and assigns, in accordance with the terms of this instrument.

WCSR 2323897v1

States:

PATENT REEL: 018056 FRAME: 0917

4/29/2006

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.

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

1.

Residence Address: Ellicott City, Maryland

Post Office Address: 3915 Paul Mill Road, Ellicott City, MD 21042

Citizenship: U.S.

WCSR 2323897v1

RECORDED: 08/04/2006

PATENT REEL: 018056 FRAME: 0918