#### 502688708 02/20/2014

#### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2735313

SUBMISSION TYPE:		NEW ASSIGNMENT					
NATURE OF CONVEYANCE:		ASSIGNMENT					
CONVEYING PARTY DATA							
<u> </u>			ame	Execution Date			
ARUN ARORA				02/11/2014			
MARVIN I. GREENE				02/11/2014			
RECEIVING PARTY DATA							
Name:	LUMMUS TE	LUMMUS TECHNOLOGY INC.					
Street Address:	1515 BROAD	1515 BROAD STREET					
City:	BLOOMFIEL	BLOOMFIELD					
State/Country:	NEW JERSE	NEW JERSEY					
Postal Code:	07003-3096	07003-3096					
Property Type			Number				
Application Number: 14179		14179	083				
CORRESPONDENCE DATA  Fax Number: (713)228-8778  Email: kingery@oshaliang.com  Correspondence will be sent via US Mail when the email attempt is unsuccessful.  Correspondent Name: JEFFREY S. BERGMAN  Address Line 1: 909 FANNIN ST.  Address Line 2: SUITE 3500  Address Line 4: HOUSTON, TEXAS 77010							
ATTORNEY DOCKET NUMBER:			17421/163001				
NAME OF SUBMITTER:			ALAN KINGERY				
Signature:			/Jeffrey S. Bergman/				
Date:			02/20/2014				

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	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 3 source=17421163001#page1.tif	
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# 80911 PATENT TRADEMARK OFFICE

#### DECLARATION AND ASSIGNMENT - WORLDWIDE

Whereas, the undersigned individual(s) (referred to herein as the "INVENTOR(S)")

has/have invented:
☐ The attached application to be filed as a United States application or PCT international application, or ☐ ☐ United States application or PCT international application number ☐ 14/179,083 ☐ filed on ☐ February 12, 2014 ☐ ; and, entitled:
PROCESSING VACUUM RESIDUUM AND VACUUM GAS OIL IN EBULLATED BED REACTOR SYSTEMS
Regarding that application, each of the INVENTOR(S) declares the following:
<ul> <li>The above-identified application was made or authorized to be made by me.</li> <li>I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.</li> <li>I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.</li> </ul>
For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the INVENTOR(S) hereby assign, transfer, and set over to:
Lummus Technology Inc.
having the following address:
1515 Broad Street Bloomfield, New Jersey 07003-3096

(referred to herein as "COMPANY"), its successors, and assigns, the entire right, title, and interest, worldwide, in and to the invention described in the patent application identified above (referred to herein as "INVENTION"), together with said patent application, all divisions, continuations, continuations-in-part, reissues, and extensions thereof, and all Letters Patent (domestic and foreign) that may be granted therefor. Such interest represents the entire ownership of said applications and Letters Patent when granted and is to be owned by COMPANY, its successors, and assigns, or their legal representatives, for the full and entire term for which such Letters Patent may be granted or extended, as fully and entirely as the same would have been

In addition, the undersigned INVENTOR(S) each hereby agrees:

enjoyed by the INVENTOR(S) if this assignment had not been made.

1. To sign and execute any further documents that may be necessary or desirable, lawful, and proper in connection with the prosecution of all applications for patent(s) on the INVENTION in the United States, including without limitation said application and all divisions, continuations, continuations-in-part, amendments thereof, and all

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### **OSHALIANG**

Intellectual Property Law

- To execute all papers and documents and to perform all lawful acts that may be necessary in connection with claims to priority or otherwise under the International Convention for the Protection of Industrial Property or similar treaties or agreements;
- To perform all lawful affirmative acts that may be necessary to obtain the grant of valid and enforceable patents to COMPANY,

The undersigned INVENTOR(S) each hereby authorizes and requests the Commissioner of Patents and Trademarks in the United States to issue any and all Letters Patent resulting from said application, including without limitation any division, continuation, continuation-in-part, or reissue thereof to COMPANY.

The undersigned INVENTOR(S) each hereby grants to the firm of OSHA • LIANG LLP the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for the recordation of this document.

IN WITNESS WHEREOF, this Assignment has been executed by each of the undersigned individuals on the date appearing by such individual's signature: 1st Inventor Signature: Print or Type Name: Arun Arora 2nd Inventor Signature: Print or Type Name: Marvin I. Greene 3rd Inventor Signature: Date Print or Type Name: 4th Inventor Signature: Date Print or Type Name: This Assignment may be signed before either: (a) a Notary Public for one of the States of the United States, or (b) two witnesses who sign below: State of NEW JERSEY County of ESSEX NOTARY PUBLIC Before me personally appeared: 4th Inventor each of whom acknowledged the foregoing instrument to be a free act and deed and also represented that he/she is authorized to execute this Assignment. Dated: 🗷 My commission expires: NOTARY PUBLIC OF NEW JERSEY

Signature of Witness:

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MY COMMISSION EXPIRES JULY 24, 2018

## **OSHALIANG**

Intellectual Property Law

Date	Print or Type Name: Robert Valente
	The Date of the Da
	Signature of Witness: Novak K. Morabas L
Date	Print or Type Name: MARIA RI NAZNONE

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RECORDED: 02/20/2014