PATENT ASSIGNMENT COVER SHEET

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

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------------|----------------|
| ANDREW ALBERT HRAMETZ | 03/15/2010 |
| ALEXANDER T. DUNCAN | 03/15/2010 |

RECEIVING PARTY DATA

| Name: | HALLIBURTON ENERGY SERVICES, INC. |
|-----------------|-----------------------------------|
| Street Address: | 10200 BELLAIRE BLVD |
| City: | HOUSTON |
| State/Country: | TEXAS |
| Postal Code: | 77072 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15146356 |

CORRESPONDENCE DATA

Fax Number:

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.

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| ATTORNEY DOCKET NUMBER: | 1880.306US3 |
|-------------------------|----------------------|
| NAME OF SUBMITTER: | ROBIN L. MONSEES |
| SIGNATURE: | / Robin L. Monsees / |
| DATE SIGNED: | 08/17/2016 |

Total Attachments: 5

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PATENT 503963549 REEL: 039462 FRAME: 0452

RECORDATION FORM COVER SHEET PATENTS ONLY

Atty Ref/Docket No.: 1880,306US3 Patent and Trademark Office To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof. Name and address of receiving party(ies): 1. Name of conveying party(ies): Name: Halliburton Energy Services, Inc. Andrew Albert Hrametz, Alexander T. Duncan Street Address: 10200 Bellaire Blvd Additional name(s) of conveying party(ies) attached? City: Houston State: TX Zip: <u>77072</u> []Yes [X]No Country: United States of America 3. Nature of conveyance: Additional name(s) & address(es) attached? []Yes [X]No [] Merger [X] Assignment [] Security Agreement [] Change of Name [] Other Execution Date: March 15, 2010, March 15, 2010 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) Serial No. 15/146,356, filed May 4, 2016 Additional numbers attached? []Yes [X]No 6. Total number of applications and patents involved: 1 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41):\$ 0.00 Name: Michael R. Mischnick [Authorized to be charged to deposit account 19-Address: 0743 Schwegman Lundberg & Woessner, P.A. P.O. Box 2938 Please charge any additional fees or credit any over Minneapolis, MN 55402--0938 payments to our Deposit Account No.: 19-0743 DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. August 16, 2016 Michael R. Mischnick/Reg. No. 52,036 Name of Person Signing Signature Total number of pages including cover sheet: 5

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks Mail Stop Assignment Recordation Services P.O. Box 1450 Alexandria, VA 22313-1450

ASSIGNMENT

WHEREAS, We, Andrew Albert Hrametz, residing at 806 Magnolia Dr., Rosenberg, TX 77471, and Alex Duncan, residing at 10526 Friars Hill, Houston, TX 77070, made certain new and useful inventions and improvements which are described in an application for U.S. Letters Patent on December 13, 2006, which application was assigned U.S. patent application serial number 12/517.652, and is entitled LEAD-FREE SOLDER ALLOY FOR PRINTED CIRCUIT BOARD ASSEMBLIES FOR HIGH-TEMPERATURE ENVIRONMENTS;

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned do hereby:

SELL, ASSIGN AND TRANSFER to Halliburton Energy Services. Inc. (the "Assignee"), a corporation of the State of Delaware, having a place of business at 10200 Bellaire Blvd, Houston, TX 77072, the entire right, title and interest for the United States and all foreign countries in and to: any and all inventions and improvements which are disclosed in the identified application for U.S. Letters Patent, and which may be further identified below; such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States (including all provisional and non-provisional applications), and in all foreign countries on any of such inventions and/or improvements (including any applications for utility models); all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such inventions and/or improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and to claim priority based on the identified application;

AUTHORIZE AND REQUEST that any attorney associated with U.S. PTO Customer No. 21186 may (directly or through his/her designee) delete, insert, or alter any information identifying this application, or any related application, below, after execution of this Assignment;

Additional Application Information

No Provisional claim for priority is being made at this time.

No U.S. Non-Provisional claim for priority is being made at this time.

PCT Application Serial No. PCT/US2006/047586, filed on December 13, 2006.

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

PATENT REEL: 039462 FRAME: 0454 ASSIGNMENT Dooket No: 1880.306US1

ASSIGNMENT

Client Ref. No. 2006-IP-022462 US / EBilling 2007-IPRO-004083

Assignors: Andrew Albert Hranetz et al.

Title: LEAD-FREE SOLDER ALLOY FOR PRINTED CIRCUIT BOARD ASSEMBLIES FOR HIGH-TEMPERATURE

ENVIRONMENTS

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and/or property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, that when requested and without compensation, but at the expense of the Assignee, in order to carry out in good faith the intent and purpose of this Assignment, the undersigned will (1) execute all provisional, non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers; (3) communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; (4) cooperate with the Assignee in any interference, reexamination, reissue, opposition, dispute, or litigation involving any of the applications or patents for such improvements; and (5) take such further actions as the Assignee shall reasonably consider necessary or desirable for vesting title to such improvements in the Assignee, or for securing, maintaining and enforcing proper patent protection for such improvements;

THIS AGREEMENT IS TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned, and is to extend to the benefit of the successors, assigns and nominees of the Assignee.

AGREED as of the date of my signature below:

Page 2 of 4

Docket No: 1880.306US1 ASSIGNMENT Client Ref. No. 2006-IP-022462 US / EBilling 2007-IPRO-004083 Assignors: Andrew Albert Firametz et al. Scriel Number: 12/517,652 Title: LEAD-FREE SOLDER ALLOY FOR PRINTED CIRCUIT BOARD ASSEMBLIES FOR HIGH-TEMPERATURE ENVIRONMENTS Page 3 of 4 IN TESTIMONY WHEREOF, I have hereunto set my hand this 15th day of MARCH , 2010. alwallet The Andrew Albert Hrametz STATE OF TEXAS COUNTY OF HORATS On this 15 day of MARCH 20 10 before me personally appeared Andrew Albert Hrametz, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth. REBECCA LYNN EHNTHOLT **NOTARY PUBLIC** STATE OF TEXAS **SEALI** COMM. EXPIRES 08-04-2011 Notary Public

Docket No: 1880.306US1 ASSIGNMENT Client Ref. No. 2006-IP-022462 US / EBilling 2007-IPRO-004083 Serial Number: 12/517,652 Assignors: Andrew Albert Hrametz et al. Title: LEAD-FREE SOLDER ALLOY FOR PRINTED CIRCUIT BOARD ASSEMBLIES FOR HIGH-TEMPERATURE **ENVIRONMENTS** Page 4 of 4 IN TESTIMONY WHEREOF, I have hereunto set my hand this 15714 day of MARCH , 20 10. Alex Duncan STATE OF TEXAS COUNTY OF HOLATS On this 15 day of NYACH, 20 10 before me personally appeared Alex Duncan, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth. REBECCA LYNN EHNTHOLT NOTARY PUBLIC

[SEAL]

PATENT

STATE OF TEXAS

COMM. EXPIRES 09-04-2011

Notary Public

RECORDED: 08/17/2016 REEL: 039462 FRAME: 0457