PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date |
|------------------|----------------|
| Lee M. SMITH | 07/15/2010 |
| Alan B. WEBB | 07/20/2010 |
| Vijay KARODE | 07/30/2010 |
| Karl M. TUNSTALL | 07/09/2010 |

RECEIVING PARTY DATA

| Name: | Halliburton Energy Services, Inc. | |
|-----------------|-----------------------------------|--|
| Street Address: | 10200 Bellaire Boulevard | |
| City: | Houston | |
| State/Country: | TEXAS | |
| Postal Code: | 77072 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 12833393 |

CORRESPONDENCE DATA

Fax Number: (972)516-0608

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

Phone: 972-516-0030

Email: mail@smithipservices.com

Correspondent Name: SMITH IP SERVICES, P.C.

Address Line 1: P.O. Box 997

Address Line 4: Rockwall, TEXAS 75087

| ATTORNEY DOCKET NUMBER: | 2009-IP-026326 U1 US |
|-------------------------|----------------------|
| NAME OF SUBMITTER: | Sally Ann Smith |

Total Attachments: 8

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PATENT REEL: 024837 FRAME: 0147 OP \$40.00 12833393

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source=AssignmentSMITH#page2.tif source=AssignmentWEBB#page1.tif source=AssignmentWEBB#page2.tif source=AssignmentKARODE#page1.tif source=AssignmentKARODE#page2.tif source=AssignmentTUNSTALL#page1.tif source=AssignmentTUNSTALL#page2.tif

In consideration of one dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I the undersigned, Lee M. SMITH, having made an invention in a "DRILL STRING/ANNULUS SEALING WITH SWELLABLE MATERIALS" while in the employ of HALLIBURTON ENERGY SERVICES, INC., a corporation organized and existing under the laws of the State of Delaware, doing business at 10200 Bellaire Boulevard, Houston, Texas 77072, (sometimes hereinafter called "ASSIGNEE"), do hereby ASSIGN, SELL and CONVEY to said ASSIGNEE, its successors and assigns, the entire right, title and interest throughout the world in and to:

- 1. Said invention in a "DRILL STRING/ANNULUS SEALING WITH SWELLABLE MATERIALS";
- 2. United States of America patent application on said invention, Attorney File No. 2009-IP-026326 U1 US, U.S. Serial No. 12/833,393 filed July 9, 2010, executed by me, entitled "DRILL STRING/ANNULUS SEALING WITH SWELLABLE MATERIALS":
- 3. All applications for patent or like protection on said invention that have now been or may in the future be made by us or our legal representatives, whether in the United States of America or any other place anywhere in the world:
- 4. All patents and like protection that have now been or may in the future be granted on said invention to us or our legal representatives, whether in the United States of America or in any other country or place anywhere in the world:
- 5. All substitutions for and divisions, continuations, continuations-inpart, renewals, reissues, extensions, and the like of said applications and patents and like grants, including without limitations, those obtained or permissible under past, present and future law and statutes;
- 6. All rights of action on account of past, present and future unauthorized use of said invention for infringement of said patents and like protection;
- 7. The right to ASSIGNEE to file in its name applications for patents and like protection for said invention in any country or countries foreign to the United States; and

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| 8. All international rights of priority associated with said invention, applications, patents and like protection; and we covenant that we, our heirs, legal representatives, assigns, administrators, and executors will at the expense of ASSIGNEE, its successors and assigns, execute all papers and perform such other acts as may be reasonably necessary to give ASSIGNEE, its successors and assigns, the full benefit of this Assignment. |
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| executed at Anchorage County, Alaska, on the 15 th day of July , 2010. |
| Lee M. SMITH |
| STATE OF Alaska \$ COUNTY OF Anchorage \$ |
| BEFORE ME, the undersigned authority, on this day personally appeared Lee M. SMITH known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed. |
| GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 15th day of July , 2010. |
| SEAL] |
| My Commission Expires: $3 73 13$ |
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In consideration of one dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I the undersigned, Alan B. WEBB, having made an invention in a "DRILL STRING/ANNULUS SEALING WITH SWELLABLE MATERIALS" while in the employ of HALLIBURTON ENERGY SERVICES, INC., a corporation organized and existing under the laws of the State of Delaware, doing business at 10200 Bellaire Boulevard, Houston, Texas 77072, (sometimes hereinafter called "ASSIGNEE"), do hereby ASSIGN, SELL and CONVEY to said ASSIGNEE, its successors and assigns, the entire right, title and interest throughout the world in and to:

- 1. Said invention in a "DRILL STRING/ANNULUS SEALING WITH SWELLABLE MATERIALS":
- 2. United States of America patent application on said invention, Attorney File No. 2009-IP-026326 U1 US, U.S. Serial No. 12/833,393 filed July 9, 2010, executed by me, entitled "DRILL STRING/ANNULUS SEALING WITH SWELLABLE MATERIALS";
- 3. All applications for patent or like protection on said invention that have now been or may in the future be made by us or our legal representatives, whether in the United States of America or any other place anywhere in the world:
- 4. All patents and like protection that have now been or may in the future be granted on said invention to us or our legal representatives, whether in the United States of America or in any other country or place anywhere in the world;
- 5. All substitutions for and divisions, continuations, continuations-inpart, renewals, reissues, extensions, and the like of said applications and patents and like grants, including without limitations, those obtained or permissible under past, present and future law and statutes;
- 6. All rights of action on account of past, present and future unauthorized use of said invention for infringement of said patents and like protection;
- 7. The right to ASSIGNEE to file in its name applications for patents and like protection for said invention in any country or countries foreign to the United States; and

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| 8. All international rights of priority associated with said invention applications, patents and like protection; and we covenant that we, our heirs, legal representatives, assigns, administrators, and executors will at the expense of ASSIGNEE, its successors and assigns, execute all papers and perform such other acts as may be reasonably necessary to give ASSIGNEE, its successors and assigns, the full benefit of this Assignment. |
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| EXECUTED at <u>larrant</u> County, Texas, on the <u>20^A</u> day of July , 2010. |
| Alan B. WEBB |
| STATE OF § COUNTY OF § |
| BEFORE ME, the undersigned authority, on this day personally appeared Alan B. WEBB known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed. GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the |
| day of <u>July</u> , 2010. |
| Alicia Monie Ken Notary Public |
| My Commission Expires: 3/23/2013 |
| ON OTARY B |

In consideration of one dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I the undersigned, Vijay KARODE, having made an invention in a "DRILL STRING/ANNULUS SEALING WITH SWELLABLE MATERIALS" while in the employ of HALLIBURTON ENERGY SERVICES, INC., a corporation organized and existing under the laws of the State of Delaware, doing business at 10200 Bellaire Boulevard, Houston, Texas 77072, (sometimes hereinafter called "ASSIGNEE"), do hereby ASSIGN, SELL and CONVEY to said ASSIGNEE, its successors and assigns, the entire right, title and interest throughout the world in and to:

- 1. Said invention in a "DRILL STRING/ANNULUS SEALING WITH SWELLABLE MATERIALS";
- 2. United States of America patent application on said invention, Attorney File No. 2009-IP-026326 U1 US, U.S. Serial No. 12/833,393 filed July 9, 2010, executed by me, entitled "DRILL STRING/ANNULUS SEALING WITH SWELLABLE MATERIALS";
- 3. All applications for patent or like protection on said invention that have now been or may in the future be made by us or our legal representatives, whether in the United States of America or any other place anywhere in the world;
- 4. All patents and like protection that have now been or may in the future be granted on said invention to us or our legal representatives, whether in the United States of America or in any other country or place anywhere in the world;
- 5. All substitutions for and divisions, continuations, continuations-inpart, renewals, reissues, extensions, and the like of said applications and patents and like grants, including without limitations, those obtained or permissible under past, present and future law and statutes;
- 6. All rights of action on account of past, present and future unauthorized use of said invention for infringement of said patents and like protection;
- 7. The right to ASSIGNEE to file in its name applications for patents and like protection for said invention in any country or countries foreign to the United States; and

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All international rights of priority associated with said invention, applications, patents and like protection; and we covenant that we, our heirs, legal representatives, assigns, administrators, and executors will at the expense of ASSIGNEE, its successors and assigns, execute all papers and perform such other acts as may be reasonably necessary to give ASSIGNEE, its successors and assigns, the full benefit of this Assignment. EXECUTED at Williams County, Texas, on the 30 day of July, 2010. Vijay KARODÉ STATE OF North Datota § COUNTY OF William BEFORE ME, the undersigned authority, on this day personally appeared Vijay KARODE known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed. GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 30Th day of July , 2010. **PEGGY SUNDBY** Notary Public State of North Dakota My Commission Expires December 12, 2013 [SEAL]

My Commission Expires:

In consideration of one dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I the undersigned, Karl M. TUNSTALL, having made an invention in a "DRILL STRING/ANNULUS SEALING WITH SWELLABLE MATERIALS" while in the employ of HALLIBURTON ENERGY SERVICES, INC., a corporation organized and existing under the laws of the State of Delaware, doing business at 10200 Bellaire Boulevard, Houston, Texas 77072, (sometimes hereinafter called "ASSIGNEE"), do hereby ASSIGN, SELL and CONVEY to said ASSIGNEE, its successors and assigns, the entire right, title and interest throughout the world in and to:

- 1. Said invention in a "DRILL STRING/ANNULUS SEALING WITH SWELLABLE MATERIALS":
- 2. United States of America patent application on said invention, Attorney File No. 2009-IP-026326 U1 US, U.S. Serial No. 12/833,393 filed July 9, 2010, executed by me, entitled "DRILL STRING/ANNULUS SEALING WITH SWELLABLE MATERIALS";
- 3. All applications for patent or like protection on said invention that have now been or may in the future be made by us or our legal representatives, whether in the United States of America or any other place anywhere in the world;
- 4. All patents and like protection that have now been or may in the future be granted on said invention to us or our legal representatives, whether in the United States of America or in any other country or place anywhere in the world:
- 5. All substitutions for and divisions, continuations, continuations-inpart, renewals, reissues, extensions, and the like of said applications and patents and like grants, including without limitations, those obtained or permissible under past, present and future law and statutes;
- 6. All rights of action on account of past, present and future unauthorized use of said invention for infringement of said patents and like protection;
- 7. The right to ASSIGNEE to file in its name applications for patents and like protection for said invention in any country or countries foreign to the United States; and

applications, patents and like protection; and we covenant that we, our heirs, legal representatives, assigns, administrators, and executors will at the expense of ASSIGNEE, its successors and assigns, execute all papers and perform such other acts as may be reasonably necessary to give ASSIGNEE, its successors and assigns, the full benefit of this Assignment. day of _______, 2010. STATE OF <u>Colorado</u> § § State of <u>Colorado</u> § § BEFORE ME, the undersigned authority, on this day personally appeared Karl M. TUNSTALL known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed. GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the <u>ılı,</u>, 2010. My Commission Expires: May 12014

All international rights of priority associated with said invention,

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RECORDED: 08/13/2010

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