

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Thomas J. Wuensche	12/21/2009
James Barker	12/21/2009
Gayle Moritz	12/28/2009
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:	12643988
CORRESPONDENCE DATA	
Fax Number:	(972)418-3877
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	972-418-3892
Email:	ruthine.liebman@halliburton.com
Correspondent Name:	Halliburton Energy Services, Inc.
Address Line 1:	2601 Beltline Road
Address Line 2:	1-B-121
Address Line 4:	Carrollton, TEXAS 75006
ATTORNEY DOCKET NUMBER:	2009-IP-020220 U1 US
NAME OF SUBMITTER:	Ruthine Liebman
<p>Total Attachments: 4</p> <p>source=2009-P020220U1USAssignment#page1.tif</p>	

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ASSIGNMENT

IN CONSIDERATION OF TEN DOLLARS (\$10.00) cash in hand paid to us by **HALLIBURTON ENERGY SERVICES, INC.**, and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, we, **THOMAS J. WUENSCHKE, JAMES BARKER, and GAYLE MORITZ** ("ASSIGNORS"), having made an invention in "**DEFLAGRATION TO DETONATION TRANSITION DEVICE**," while in the employ either as an employee or consultant of **HALLIBURTON ENERGY SERVICES, INC.**, a corporation organized and existing under the laws of the State of Texas, doing business at 10200 Bellaire Boulevard, Houston, Texas 77072 (sometimes hereinafter called "ASSIGNEE"), do hereby ASSIGN, SELL and CONVEY to said **HALLIBURTON ENERGY SERVICES, INC.** its successors and assigns, the entire right, title and interest throughout the world in and to:

1. Said invention in "**DEFLAGRATION TO DETONATION TRANSITION DEVICE**;"
2. All applications for patent or like protection on said invention that have now been or may in the future be made by me or my legal representatives, including any continuation, continuation-in-part and any other utility applications that may be based on this invention, whether in the United States of America or any other place anywhere in the world;
3. All patents and like protection that have now been or may in the future be granted on said invention to me or my legal representatives, whether in the United States of America or in any other country or place anywhere in the world;
4. All substitutions for and divisions, continuations, continuations-in-part, renewals, reissues, extensions, and the like of said applications and patents and like grants, including without limitation, those obtained or permissible under past, present and future laws and statutes;
5. All rights of action on account of past, present and future unauthorized use of said invention and for infringement of said patents and like protection;
6. The right in 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
7. All international rights of priority associated with said invention, applications, patents and like protection;

and we covenant that we, and 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 on the date indicated below, opposite my signature.

ASSIGNOR

Date: 21 December 2009

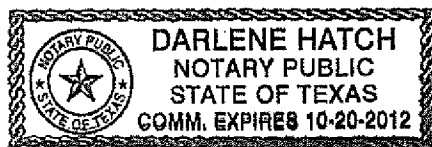
Thomas J. Wuensche
Thomas J. Wuensche

THE STATE Texas §
§
COUNTY OF Johnson §

BEFORE ME, the undersigned authority, on this day personally appeared **Thomas J. Wuensche**, 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 21st day of December, 2009.

[SEAL]



Darlene Hatch
Notary Public in and for
the State of Texas

My Commission Expires:

10/20/2012

ASSIGNOR

Date: 21 DECEMBER 2009

James Barker
James Barker

THE STATE Texas §
COUNTY OF Johnson §

BEFORE ME, the undersigned authority, on this day personally appeared **James Barker**, 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 21st day of December, 2009.

[SEAL]



My Commission Expires:

10/20/2012

Darlene Hatch
Notary Public in and for
the State of Texas

Date: 29 December 2009

ASSIGNOR

Gayle Moritz
Gayle Moritz

THE STATE Texas §
COUNTY OF Johnson §

BEFORE ME, the undersigned authority, on this day personally appeared **Gayle Moritz**, 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 28th day of December, 2009.

[SEAL]



Darlene Hatch
Notary Public in and for
the State of Texas

My Commission Expires:

10/20/2012