Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date	
Alan Jackson Marshall	04/09/2009	
Shantanu Swadi	03/30/2009	
James A. Simson	03/30/2009	

RECEIVING PARTY DATA

Name:	Smith International, Inc.	
Street Address:	1310 Rankin Road	
City:	Houston	
State/Country:	TEXAS	
Postal Code:	77073	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12407338

CORRESPONDENCE DATA

Fax Number: (713)238-8008

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

Phone: 713-238-8000

Email: eskaggs@conleyrose.com

Correspondent Name: Gregory L. Maag Address Line 1: P.O. Box 3267

Address Line 4: Houston, TEXAS 77253-3267

ATTORNEY DOCKET NUMBER:	1030-40000
NAME OF SUBMITTER:	Gregory L. Maag

Total Attachments: 4

source=1030-40000 Executed Assignment#page1.tif source=1030-40000 Executed Assignment#page2.tif

PATENT 501063193 REEL: 023766 FRAME: 0729

12407338

CH \$40 00

source=1030-40000 Executed Assignment#page3.tif source=1030-40000 Executed Assignment#page4.tif

PATENT REEL: 023766 FRAME: 0730

ASSIGNMENT

IN CONSIDERATION OF TEN DOLLARS (\$10.00) cash in hand paid to us by SMITH INTERNATIONAL, INC., and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, we, Alan Jackson Marshall, Shantanu Swadi, and James A. Simson ("ASSIGNORS"), having made an invention in "A Percussion Drilling Assembly and Locking System Therefor," while in the employ either as an employee or consultant of SMITH INTERNATIONAL, INC., a corporation organized and existing under the laws of the State of State of Delaware, doing business at 1310 Rankin Road, Houston, Texas 77073 (sometimes hereinafter called "ASSIGNEE"), do hereby ASSIGN, SELL and CONVEY to said SMITH INTERNATIONAL, INC. its successors and assigns, the entire right, title and interest throughout the world in and to:

- 1. Said invention in "A PERCUSSION DRILLING ASSEMBLY AND LOCKING SYSTEM THEREFOR;"
- 2. United States of America patent application on said invention, filed as U.S. Patent Application No. 12/407,338 filed March 19, 2009 (Attorney's File No. 1030-40000); entitled "A PERCUSSION DRILLING ASSEMBLY AND LOCKING SYSTEM THEREFOR;"
- 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, 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;
- 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-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;
- 6. 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;
- 7. 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

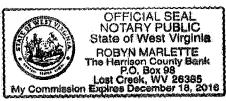
280998.1/1030.40000

8. 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.

Date: 42009	ASSIGNORS Alan Jackson Marshall
THE STATE NV 8 COUNTY OF HAYY CON 8	v
Marshall, known to me to be the person acknowledged to me that he executed the	authority, on this day personally appeared Alan Jackson whose name is subscribed to the foregoing instrument, and same for the purposes and consideration therein expressed. AND SEAL OF OFFICE, this the day of
- April 3	Rela Malette
[SEAL]	Notary Public in and for the State of \NV
My Commission Expires:	the state of W
12/18/2016	
	OFFICIAL GEAL



EXECUTED on the date indicated below, opposite the control of the date indicated below, opposite the control of	posite my signature.
Date: 3.30.09	Shaptanu Swadi
THE STATE OF TEXAS & SCOUNTY OF HAVELS &	
BEFORE ME, the undersigned authority, or known to me to be the person whose name is acknowledged to me that he executed the same for the	
GIVEN UNDER MY HAND AND SEAL July 2009.	OF OFFICE, this the 30th day of
[S E A L] My Commission Expires;	Notary Public in and for the State of 70x05
6-8-2012	
V O STV S	

EXECUT	ED on the date indi	cated below, opp	osite my signature.		
Date:	<u>3 30 61</u>	ALCONOMICS TO CONTRACT TO CONT	James A. Simson	and the second s	
THE STATE OF	Texas Harris	, 8 8 8			
BEFORE known to me to acknowledged to r	ME, the undersign be the person when that he executed	ed authority, on whose name is the same for the	this day personally appear subscribed to the foregoing purposes and consideration	going instrum on therein expr	ent, and essed.
GIVEN U	NDER MY HAN	D AND SEAL , 2009.	OF OFFICE, this the	302	_ day of
[SEAL]	INE MY CO	EZ G. CAMERON MMISSION EXPIRES June 8, 2012	Notary Public in and for the State of Texas		_w ance
My Commission I	Expires:				
6. X-2	OIL				

RECORDED: 01/12/2010