

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT								
NATURE OF CONVEYANCE:	ASSIGNMENT								
CONVEYING PARTY DATA									
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:70%;">Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Amardeep Singh</td> <td>06/05/2000</td> </tr> <tr> <td>Quan Van Nguyen</td> <td>06/05/2000</td> </tr> <tr> <td>Sujian Huang</td> <td>06/05/2000</td> </tr> </tbody> </table>		Name	Execution Date	Amardeep Singh	06/05/2000	Quan Van Nguyen	06/05/2000	Sujian Huang	06/05/2000
Name	Execution Date								
Amardeep Singh	06/05/2000								
Quan Van Nguyen	06/05/2000								
Sujian Huang	06/05/2000								
RECEIVING PARTY DATA									
Name:	Smith International, Inc.								
Street Address:	16740 Hardy Street								
City:	Houston								
State/Country:	TEXAS								
Postal Code:	77032								
PROPERTY NUMBERS Total: 1									
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>11442520</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	11442520				
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Application Number:	11442520								
CORRESPONDENCE DATA									
Fax Number:	(713)238-8008								
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>									
Phone:	713-238-8000								
Email:	eskaggs@conleyrose.com								
Correspondent Name:	Collin A. Rose								
Address Line 1:	P.O. Box 3267								
Address Line 4:	Houston, TEXAS 77253-3267								
ATTORNEY DOCKET NUMBER:	1030-20005								
NAME OF SUBMITTER:	Collin A. Rose								

CH \$40.00 11442520

Total Attachments: 3
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 source=1030-20005 Assignment#page2.tif

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PATENT
REEL: 020356 FRAME: 0654

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, AMARDEEP SINGH, QUAN VAN NGUYEN, and SUJIAN HUANG ("ASSIGNORS"), having made an invention in Hydro-Lifter Rock Bit With PDC Inserts, 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 Delaware, doing business at 16740 Hardy Street, Houston, Texas 77032 (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 Hydro-Lifter Rock Bit With PDC Inserts;
2. United States of America patent application on said invention, Attorney's File No. 1030-20000, executed by us concurrently herewith, entitled Hydro-Lifter Rock Bit With PDC Inserts;
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
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 at the place and on the date indicated below, opposite our signatures.

ASSIGNORS

Date: 6/5/2000

Amardeep Singh
Name: Amardeep Singh

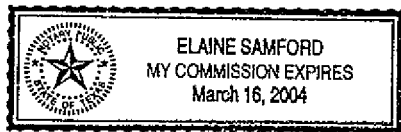
Executed at: _____

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

BEFORE ME, the undersigned authority, on this day personally appeared Amardeep Singh 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 5th day of June, 2000.

[SEAL]



Elaine Samford
Notary Public in and for
the State of TEXAS

Date: JUNE 5th, 2000

Quan Van Nguyen
Name: Quan Van Nguyen

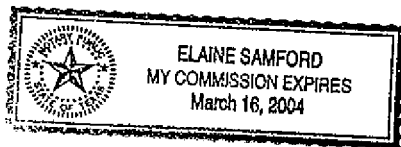
Executed at: _____

THE STATE OF TEXAS §
§
COUNTY OF HARRIS §

BEFORE ME, the undersigned authority, on this day personally appeared Quan Van Nguyen, 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 5th day of June, 2000.

[SEAL]



Elaine Samford
Notary Public in and for
the State of TEXAS

Date: June 5, 2000

Sujian Huang
Name: Sujian Huang

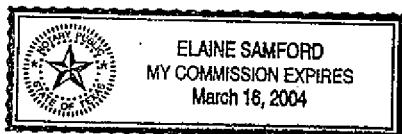
Executed at: _____

THE STATE OF TEXAS §
§
COUNTY OF HARRIS §

BEFORE ME, the undersigned authority, on this day personally appeared Sujian Huang, 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 5th day of June, 2000.

[SEAL]



Elaine Samford
Notary Public in and for
the State of TEXAS