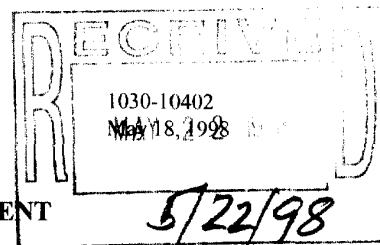


06-04-1998



100727516

ocket No.:



ASSIGNMENT (DOCUMENT) COVER SHEET - PATENT

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original document or copy thereof:

1. Name of conveying party(ies) (Assignor):

Robert H. Slaughter, Jr., Peter Cariveau, and Roger Didericksen

2. Name and address of party(ies) to whom transfer is made:

Smith International, Inc.
16740 Hardy Street
Houston, Texas 77032

3. Nature of conveyance:

[X] Assignment [] Change of Name [] Other

Execution Date: May 13, 1998

4. Identification of application:

Inventor(s): Robert H. Slaughter, Jr., Peter Cariveau, and Roger Didericksen
Serial/Patent No.: 08/980,935
Filing Date: December 1, 1997
Title of Invention: Sealed Bearing Drill Bit with Dual-Seal Configuration and Fluid Cleaning Capability

5. Address to which document should be returned after recordal:

E. RANDALL SMITH
Conley, Rose & Tayon, P.C.
P. O. Box 3267
Houston, Texas 77253-3267

6. Total number of pages including cover sheet, attachments and document: 5

7. Fee payment is provided for as follows:

- [] New Application Transmittal (Item 13)
[] FWC Transmittal (Item VIII)
[X] Attached is a check in the sum of \$40.00.
[X] Charge account No. 03-2769 if any additional fee is due or credit account No. 03-2769 with any overpayment.
[] Charge account No. 03-2769 for any fees due.

8. 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.

[Handwritten Signature]

E. RANDALL SMITH
Reg. No. 38,307
Conley, Rose & Tayon, P.C.
P. O. Box 3267
Houston, Texas 77253-3267
Tel. No. (713) 238-8000

06/03/1998 JSH/DAZZ 00000226 08900935

01 FC:581

40.00 DP

PATENT

ASSIGNMENT

IN CONSIDERATION OF TEN DOLLARS (\$10.00) cash in hand paid to us by SMITH INTERNATIONAL, INC., the receipt and sufficiency of which are hereby acknowledged, we ROBERT H. SLAUGHTER, JR., PETER CARIVEAU, and ROGER DIDERICKSEN ("ASSIGNORS"), having made an invention in SEALED BEARING DRILL BIT WITH DUAL-SEAL CONFIGURATION AND FLUID CLEANING CAPABILITY, 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 Houston, Texas (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 SEALED BEARING DRILL BIT WITH DUAL-SEAL CONFIGURATION AND FLUID CLEANING CAPABILITY;
2. United States of America patent application on said invention, Serial No. 08/980.935, filed December 1, 1997, Attorney's File No. 1030-10402 entitled SEALED BEARING DRILL BIT WITH DUAL-SEAL CONFIGURATION AND FLUID CLEANING CAPABILITY;
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-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: 5/13/98


Name: ROBERT H. SLAUGHTER, JR.

Executed at: Ponca City, OK

Date: 5/13/98


Name: PETER CARIVEAU

Executed at: Ponca City, OK

Date: 5/13/98

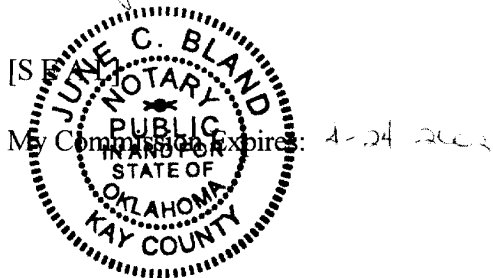

Name: ROGER DIDERICKSEN

Executed at: Ponca City, OK

THE STATE OF Oklahoma §
§
COUNTY OF Kay §

BEFORE ME, the undersigned authority, on this day personally appeared ROBERT H. SLAUGHTER, JR., 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 13th day of May, 1998.

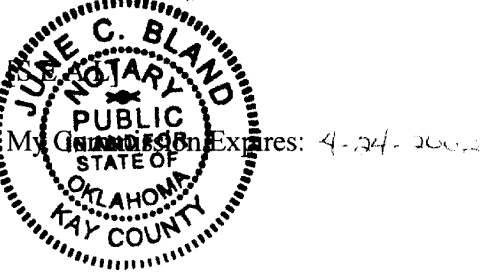


June C. Bland
Notary Public in and for
the State of Oklahoma

THE STATE OF Oklahoma §
§
COUNTY OF Kay §

BEFORE ME, the undersigned authority, on this day personally appeared PETER CARIVEAU, 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 13th day of May, 1998.



June C. Bland
Notary Public in and for
the State of Oklahoma

THE STATE OF Oklahoma §

COUNTY OF Kay §

BEFORE ME, the undersigned authority, on this day personally appeared ROGER DIDERICKSEN, 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 13th day of May, 1998.

[SEAL]

My Commission Expires 4-24-2002



June C. Blain
Notary Public in and for
the State of Oklahoma