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| Pomb PTO-1595 (Rev. 10/02) 8/18/64 OMB No. 0651-0027 (exp. 6/30/2005) Tab settings ⇔ ⇔ ♥ | 102791 | 386 . | U.S. DE U.S | PARIMENT OF | F COMMERC ademark Offi |
| To the Honorable Commissioner of | Patents and Trademarics: | Please record the attach | ed original docu | nents or copy t | hereof. |
| 1. Name of conveying party(ies): Scott D. McDonough Amardeep Singh Daniel W. Brietzke | | 2. Name and addr Name: <u>Smith In</u> Internal Addres | ess of receivinternational, ir | ng party(ies) IC, |) |
| Additional name(s) of conveying party(iss) sti | | 1 | | | |
| 3. Nature of conveyance: | | | | | |
| Assignment |]Merger]Change of Name | Street Address: | 16740 Hardy | Street | |
| Execution Date: Mugust | 17,2004 | | | · • | |
| 4. Application number(s) or patent nu | | Additional name(s) | A APPRILICIO (000) UI | | |
| A. Patent Application No.(s) <u>10/8</u> 6. Name and address of party to who concerning document should be many Y. Renee Alsandor | Additional numbers at | B. Patent No.(s ached? Yes Ver No. 6. Total number of a 7. Total fee (37 CF | applications a | nd patents in | volved: [|
| Name: Y. Renee Alsandor Smith International, Inc. | | Enclosed | n va 1) | ······ | |
| | | Authorized | to be charged | l to deposit a | ccount |
| Street Address; 16740 Hardy Stre | et | 8. Deposit account 192745 | number: | Char | ge Fe |
| City: Houston State: TX Zip; | 77032 | | | | |
| | DO NOT USE | THIS SPACE | | | |
| 9. Signature, Y. Renee Alsandor Name of Person Signing Tetal numbe | r of pages including cove | Signature Signature | documents; | 8/18/ Dake | 64 |
| mail (862) | iments to be recorded with Commissioner of Palents & T Washington, | redemarks, Box Assignment | | | |
| Б.13 | | BATENT SERVICES | IIS | - • № + ^{†0,} | , oct 26 |

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ASSIGNMENT – WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned individual(s) (referred to herein as the "INVENTOR(S)") hereby assign, transfer, and set over to:

Smith International Inc

having the following address:

16740 Hardy Street Houston, Texas 77032

(referred to herein as "COMPANY"), its successors, and assigns, the entire right, title, and interest, worldwide, in and to the invention known by the following title:

METHODS FOR EVALUATING CUTTING ARRANGEMENTS FOR DRILL BITS AND THEIR APPLICATION TO ROLLER CONE DRILL BIT DESIGNS

for which the undersigned has/have executed an application for patent in the United States of America on or about this same day, together with said patent application, all divisions, continuations, continuations-in-part, reissues, reexaminations, and extensions thereof, and all United States Letters Patent and any legal equivalent thereof in a foreign country, including the right to claim priority, which may be granted therefor. Such interest represents the entire ownership of said applications and Letters Patent when granted and is to be owned by COMPANY, its successors, and assigns, or their legal representatives, for the full and entire term for which such Letters Patent may be granted or extended, as fully and entirely as the same would have been enjoyed by the INVENTOR(5) if this assignment had not been made.

In addition, the undersigned INVENTOR(S) each hereby agrees:

- 1. To sign and execute any further documents which may be necessary or desirable, lawful, and proper in connection with the presecution of all applications for patent(s) on the INVENTION in the United States, including without limitation said application and all divisions, continuations, continuations-in-part, amendments thereof, and all interference proceedings associated therewith, or otherwise necessary or desirable to secure the title thereto to COMPANY;
- 2. To execute all papers and documents and to perform all lawful acts which ma be necessary in connection with claims to priority or otherwise under the International Convention for the Protection of Industrial Property or similar treatles or agreements;
- 3. To perform all lawful affirmative acts which may be necessary to obtain the grant of a valid and enforceable patent to COMPANY;

The undersigned INVENTOR(5) each hereby authorizes and requests the Commissioner of Patents and Trademarks in the United States to issue any and all Letters Patent resulting from said application, including without limitation any division, continuation, continuation-in-part, reissue or re-examination thereof to COMPANY.

The undersigned INVENTOR(S) each hereby grants to the firm of SMITH INTERNATIONAL, INC. the power to insett on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for the recordation of this document.

V:P\$:PORAIS-SMITH

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IN WITNESS WHEREOF, this Assignment has been executed by each of the undersigned individuals on the date appearing by such individual's signature:

| | 8/17/04 Date 9/17/04 Date 6/17/04 Date | 1" Inventor Signature: Image: Scott D. McDone Print or Type Name: Scott D. McDone 2** Inventor Signature: Amardeen Sing Print or Type Name: Amardeen Sing 3 rd Inventor Signature: Print or Type Name: Print or Type Name: Daniel W. Brietz | <u>/</u> h |
|---|---|--|---------------------------------|
| ••••••••••••••••••••••••••••••••••••••• | Date | _ 4 th Inventor Signature: Print or Type Name: | |
| | This Assignment mu | it be signed before a Notary Public for one of the States of the United State | 5. |
| Notary Public | each of whom a represented that h | | rentor x nd deed and also |
| | When this the fol | Assignment is <u>not</u> filed concurrently with the patent application, awing identifying information may be added <u>after</u> execution: U.S. Application Seriel No.: 104853,869 Filing Date: May 26, 2004 | |
| ASSIGN | MENT-WORLDWIDE | | Page 2 |

" MY FORMAS MITH

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