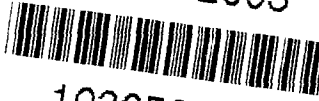


08-02-2005



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Form PTO-1595 (Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002)

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<p>1. Name of conveying party(ies): Sujian Huang</p> <p>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies)</p> <p>Name: <u>Smith International, Inc.</u></p> <p>Internal Address: _____</p> <p>Street Address: _____</p> <p>16740 Hardy Street</p> <p>City: <u>Houston</u></p> <p>State: <u>Texas</u> Zip: <u>77032</u></p> <p>Additional name(s) & address(es) attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>3. Nature of Conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger</p> <p><input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Other _____</p> <p>Execution Date: <u>July 18, 2005</u></p>	

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4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the new application is: _____

A. Patent Application No.(s):
11/096,247

B. Patent No.(s): _____

Additional numbers attached? Yes No

<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: <u>Jonathan P. Osha</u> <u>OSHA · LIANG LLP</u></p> <p>Internal Address: <u>Atty. Dkt.: 05516/224001</u></p> <p>Street Address: <u>1221 McKinney St., Suite 2800</u></p> <p>City: <u>Houston</u> State: <u>TX</u> Zip: <u>77010</u></p>	<p>6. Total number of applications and patents involved: <u>1</u></p> <p>7. Total fee (37 CFR 3.41) \$ <u>40.00</u></p> <p><input type="checkbox"/> Enclosed</p> <p><input type="checkbox"/> Authorized to be charged to deposit account</p> <p><input checked="" type="checkbox"/> Authorized to be charged to credit card (Form 2038 enclosed)</p> <p>8. Deposit account number: _____</p> <p>(Attach duplicate copy of this page if paying by deposit account)</p>
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9. 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 document.

Jeffrey S. Bergman - Reg. No. 45,925 [Signature] July 28, 2005

Name of Person Signing Signature Date

Total number of pages including cover sheet, attachments, and documents: 4

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV710214185US, in an envelope addressed to: MS Assignment Recordation Services, Director of the US Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

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PATENT REEL: 016817 FRAME: 0458

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:

TECHNIQUES FOR MODELING/SIMULATING, DESIGNING, OPTIMIZING, AND DISPLAYING HYBRID DRILL BITS

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, and extensions thereof, and all Letters Patent (domestic and foreign) that 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(S) if this assignment had not been made.

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

1. To sign and execute any further documents that may be necessary or desirable, lawful, and proper in connection with the prosecution 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 that may be necessary in connection with claims to priority or otherwise under the International Convention for the Protection of Industrial Property or similar treaties or agreements;
3. To perform all lawful affirmative acts that may be necessary to obtain the grant of valid and enforceable patents to COMPANY.

The undersigned INVENTOR(S) 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, or reissue thereof to COMPANY.

The undersigned INVENTOR(S) each hereby grants to the firm of OSHA & MAY L.L.P. the power to insert on this Assignment any further identification that 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.

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

7/18/05
 Date

1st Inventor Signature: [Signature]
 Print or Type Name: Sujian J. HUANG

2nd Inventor Signature: _____
 Print or Type Name: _____

3rd Inventor Signature: _____
 Print or Type Name: _____

4th Inventor Signature: _____
 Print or Type Name: _____

This Assignment must be signed before a Notary Public for one of the States of the United States.

NOTARY PUBLIC

State of _____
 County of _____

Before me personally appeared: Sujian J. HUANG

_____ 1st Inventor
 _____ 2nd Inventor
 _____ 3rd Inventor
 _____ 4th Inventor

each of whom acknowledged the foregoing instrument to be a free act and deed and also represented that he/she is authorized to execute this Assignment.

Dated: _____

_____ Notary Public
 My commission expires: _____

95090_1.DOC

When this Assignment is not filed concurrently with the patent application, the following identifying information may be added after execution:

U.S. Application Serial No.: 11/096,247
 Filing Date: March 31, 2005