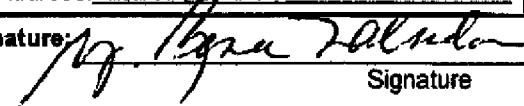


Form PTO-1595 (Rev. 07/05)  
OMB No. 0651-0027 (exp. 6/30/2008)

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## RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

<b>1. Name of conveying party(ies)</b> Amardeep Singh Scott D. McDonough  Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>2. Name and address of receiving party(ies)</b> Name: <u>Smith International, Inc.</u> Internal Address: <u>Patent Services</u>  Street Address: <u>16740 Hardy Street</u>  City: <u>Houston</u> State: <u>Texas</u> Country: <u>US</u> Zip: <u>77032</u> Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>3. Nature of conveyance/Execution Date(s):</b> Execution Date(s) <u>01/03/2008</u> <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input type="checkbox"/> Executive Order 9424, Confirmatory License <input type="checkbox"/> Other _____	<b>4. Application or patent number(s):</b> <input checked="" type="checkbox"/> This document is being filed together with a new application. A. Patent Application No.(s) <u>11/ 969,713</u> B. Patent No.(s) _____  Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>5. Name and address to whom correspondence concerning document should be mailed:</b> Name: <u>Y. Renee Alsandor</u> Internal Address: <u>Smith International, Inc.</u>  Street Address: <u>16740 Hardy Street</u>  City: <u>Houston</u> State: <u>Texas</u> Zip: <u>77032</u> Phone Number: <u>281-233-5677</u> Fax Number: <u>281-233-5970</u> Email Address: <u>raalsandor@smith.com</u>	<b>6. Total number of applications and patents involved:</b> <u>1</u>  <b>7. Total fee (37 CFR 1.21(h) &amp; 3.41)</b> \$ <u>40.-</u> <input type="checkbox"/> Authorized to be charged by credit card <input checked="" type="checkbox"/> Authorized to be charged to deposit account <input type="checkbox"/> Enclosed <input type="checkbox"/> None required (government interest not affecting title)
<b>9. Signature:</b>  <div style="text-align: center;">Signature</div> Y. Renee Alsandor Name of Person Signing	<b>8. Payment Information</b> a. Credit Card Last 4 Numbers _____ Expiration Date _____  b. Deposit Account Number <u>192745</u> Authorized User Name <u>Elaine Samford</u>  Total number of pages including cover sheet, attachments, and documents: <span style="border: 1px solid black; display: inline-block; width: 40px; height: 20px; vertical-align: middle;"></span>

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
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PATENT  
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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:

### **MULTIPLE INSERTS OF DIFFERENT GEOMETRY IN A SINGLE ROW OF A BIT**

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, re-examinations, 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(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 which 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 Patent and any legal equivalent thereof in a foreign country, 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 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 which may be necessary to obtain the grant of a valid and enforceable patent 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, reissue or re-examination thereof to COMPANY.

The undersigned INVENTOR(S) each hereby grants to the firm of Smith International, Inc. the power to insert 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.

U.S. PATENT AND TRADEMARK OFFICE

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

<u>1-3-08</u>	1 <sup>st</sup> Inventor Signature: <u>Amardeep Singh</u>
Date	Print or Type Name: <u>Amardeep Singh</u>
<u>1-3-08</u>	2 <sup>nd</sup> Inventor Signature: <u>Scott D. McDonough</u>
Date	Print or Type Name: <u>Scott D. McDonough</u>
<u>        </u>	3 <sup>rd</sup> Inventor Signature: <u>        </u>
Date	Print or Type Name: <u>        </u>
<u>        </u>	4 <sup>th</sup> Inventor Signature: <u>        </u>
Date	Print or Type Name: <u>        </u>

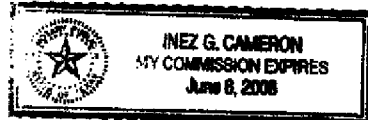
Notary Public

State of: Texas  
County of: Harris

Before me personally appeared: Amardeep Singh Scott D. McDonough  
1<sup>st</sup> Inventor 2<sup>nd</sup> Inventor  
  
3<sup>rd</sup> Inventor 4<sup>th</sup> 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: 1-3-08



Inez G. Cameron  
Notary Public My Commission expires: 6-8-08

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.: 11/969,713  
Filing Date: 01/04/2008

ASSIGNMENT-WORLDWIDE

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