

PATENT ASSIGNMENT

Electronic Version v1.1

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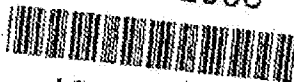
SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
YOUHE ZHANG	05/12/2005
YUELIN SHEN	05/13/2005
RECEIVING PARTY DATA	
Name:	SMITH INTERNATIONAL, INC.
Street Address:	1310 Rankin Road
City:	Houston
State/Country:	TEXAS
Postal Code:	77073
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	12796560
CORRESPONDENCE DATA	
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Correspondent Name:	Christie, Parker & Hale, LLP
Address Line 1:	P.O. Box 7068
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ATTORNEY DOCKET NUMBER:	65637/S1117
NAME OF SUBMITTER:	Constantine Marantidis
Total Attachments: 3 source=62047-Assignment#page1.tif source=62047-Assignment#page2.tif source=62047-Assignment#page3.tif	

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PATENT
 REEL: 025842 FRAME: 0529

07-27-2005

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PATENTIS 781.
 Form PTO-1595
 (Rev. 03/01) R.
 OMB No. 0651-0027 (exp. 5/31/2002)

 U.S. DEPARTMENT OF COMMERCE
 U.S. Patent and Trademark Office

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

1. Name of conveying party(ies):

 Youhe Zhang (05/12/2005) and Yuelin Shen
 (05/13/2005)

 Additional name(s) of conveying party(ies)
 attached?

☐ Yes ☒ No

3. Nature of Conveyance:

☒ Assignment

☐ Merger

☐ Security Agreement

☐ Change of Name

☐ Other

 Execution Date: in parentheses after inventor name

2. Name and address of receiving party(ies)

 Name: Smith International, Inc.

Internal Address:

Street Address:

16740 Hardy Street

 City: Houston

 State: Texas

 Zip: 77032

 Additional name(s) &
 address(es) attached:

☐ Yes ☒ No

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):

11/117,647

B. Patent No.(s):

 Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

 Name: Jonathan P. Osha
OSHA - LIANG LLP

 Internal Address: Atty. Dkt.: 05516/228002

Street Address:

1221 McKinney St., Suite 2800

 City:
 Houston

 State: TX Zip: 77010

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41)

 \$ 40.00
☐ Enclosed

☐ Authorized to be charged to deposit account

☒ Authorized to be charged to credit card
 (Form 2038 enclosed)

8. Deposit account number:

(Attach duplicate copy of this page if paying by deposit account)

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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.

 for T. Chyau Liang #48,885

Jeffrey S. Bergman - Reg. # 45,925

Name of Person Signing

Signature

July 19, 2005

Date

 Total number of pages including cover sheet, attachments, and documents: 5

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV710214248US, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: July 19, 2005

 Signature: Staci Harris (Staci V. Harris)

07/26/2005 EDDUPLR 06000234-11117647

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 PATENT
 REEL: 025842 FRAME: 0530

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:

MODIFIED CUTTERS,

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•LIANG 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.

OSHA•LIANG LLP

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

<u>5/12/05</u> Date	1 st Inventor Signature: <u>[Signature]</u> Print or Type Name: <u>Youhe ZHANG</u>
<u>5/13/05</u> Date	2 nd Inventor Signature: <u>[Signature]</u> Print or Type Name: <u>Yuelin SHEN</u>
 Date	3 rd Inventor Signature: Print or Type Name:
 Date	4 th 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

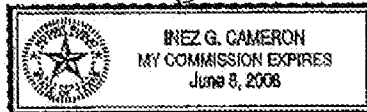
State of Texas
County of Harris

Before me personally appeared: Youhe ZHANG Yuelin SHEN
1st Inventor 2nd 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: 5/12+13/05 [Signature]
Notary Public My commission expires: 6-8-08

100244_1



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.: 11,117,647

Filing Date: April 28, 2005

ASSIGNMENT - WORLDWIDE

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