

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT2785376

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
YURI BURHAN	03/07/2014
JIBIN SHI	03/07/2014
CHEN CHEN	03/07/2014
YOUHE ZHANG	03/07/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	SMITH INTERNATIONAL, INC.
<b>Street Address:</b>	1310 RANKIN RD.
<b>City:</b>	HOUSTON
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	77073
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	13972465
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(713)228-8778
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Email:</b>	MTHACH@OSHALIANG.COM
<b>Correspondent Name:</b>	JEFFREY S. BERGMAN
<b>Address Line 1:</b>	909 FANNIN ST.
<b>Address Line 2:</b>	SUITE 3500
<b>Address Line 4:</b>	HOUSTON, TEXAS 77010
<b>ATTORNEY DOCKET NUMBER:</b>	05516/627004
<b>NAME OF SUBMITTER:</b>	MINH S. THACH
<b>SIGNATURE:</b>	/JEFFREY S. BERGMAN/
<b>DATE SIGNED:</b>	03/26/2014
<b>Total Attachments: 5</b>	
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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:

**1310 Rankin Rd.  
Houston, Texas 77073**

(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:

### **ROLLING CUTTER WITH CLOSE LOOP RETAINING RING**

for which the undersigned is/are going to file or has/have filed an application for patent in the United States of America, 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.

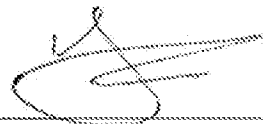
The undersigned INVENTOR(S) each hereby grants to COMPANY the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for the recordation of this document.

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

3/7/2014

Date

Inventor Signature:



Print or Type Name:

Yuri Burhan

Notary Public

State of:

Texas

County of:

Harris

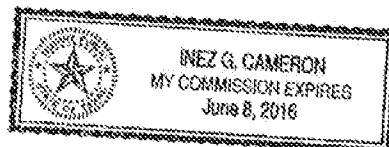
Before me personally appeared **Yuri Burhan**, who acknowledged the foregoing instrument to be a free act and deed and also represented that he/she is authorized to execute this Assignment.

Dated:

3/7/14

Notary Public

My Commission expires:



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.: 13/972,465

Filing Date: August 21, 2013

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

\_\_\_\_\_  
Date 3/7/14

Inventor Signature: \_\_\_\_\_  
Print or Type Name: Jibin Shi

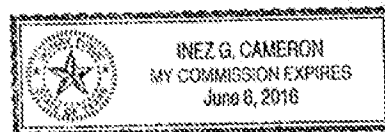
Notary Public

State of: Texas  
County of: Harris

Before me personally appeared Jibin Shi, who acknowledged the foregoing instrument to be a free act and deed and also represented that he/she is authorized to execute this Assignment.

Dated: 3/7/14

\_\_\_\_\_  
Notary Public My Commission expires: \_\_\_\_\_



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the following identifying information may be added after execution:

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Filing Date: August 21, 2013

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

\_\_\_\_\_  
Date 3/7/14

Inventor Signature: \_\_\_\_\_  
Print or Type Name: Chen Chen

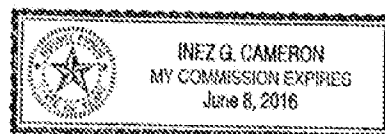
Notary Public

State of: TEXAS  
County of: HARRIS

Before me personally appeared **Chen Chen**, who acknowledged the foregoing instrument to be a free act and deed and also represented that he/she is authorized to execute this Assignment.

Dated: 3/7/14

\_\_\_\_\_  
Notary Public My Commission expires: \_\_\_\_\_



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the following identifying information may be added after execution:

*U.S. Application Serial No.: 13/972,465*  
*Filing Date: August 21, 2013*

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

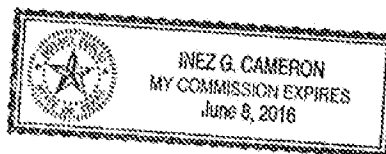
\_\_\_\_\_  
Date 3/7/14 Inventor Signature: \_\_\_\_\_  
Print or Type Name: Youhe Zhang

Notary Public

State of: TEXAS  
County of: HARRIS

Before me personally appeared **Youhe Zhang**, who acknowledged the foregoing instrument to be a free act and deed and also represented that he/she is authorized to execute this Assignment.

Dated: 3/7/14 \_\_\_\_\_  
Notary Public My Commission expires: \_\_\_\_\_



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the following identifying information may be added after execution:

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