

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT2732853

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>CHEN CHEN</td> <td>02/17/2014</td> </tr> <tr> <td>YURI BURHAN</td> <td>02/11/2014</td> </tr> <tr> <td>JIBIN SHI</td> <td>02/17/2014</td> </tr> </tbody> </table>		Name	Execution Date	CHEN CHEN	02/17/2014	YURI BURHAN	02/11/2014	JIBIN SHI	02/17/2014		
Name	Execution Date										
CHEN CHEN	02/17/2014										
YURI BURHAN	02/11/2014										
JIBIN SHI	02/17/2014										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>SMITH INTERNATIONAL, INC.</td> </tr> <tr> <td>Street Address:</td> <td>1310 RANKIN RD.</td> </tr> <tr> <td>City:</td> <td>HOUSTON</td> </tr> <tr> <td>State/Country:</td> <td>TEXAS</td> </tr> <tr> <td>Postal Code:</td> <td>77073</td> </tr> </table>		Name:	SMITH INTERNATIONAL, INC.	Street Address:	1310 RANKIN RD.	City:	HOUSTON	State/Country:	TEXAS	Postal Code:	77073
Name:	SMITH INTERNATIONAL, INC.										
Street Address:	1310 RANKIN RD.										
City:	HOUSTON										
State/Country:	TEXAS										
Postal Code:	77073										
PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>14081593</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	14081593						
Property Type	Number										
Application Number:	14081593										
CORRESPONDENCE DATA											
<p>Fax Number: (713)228-8778</p> <p>Email: MTHACH@OSHALIANG.COM</p> <p><i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i></p> <p>Correspondent Name: JEFFREY S. BERGMAN</p> <p>Address Line 1: 909 FANNIN ST.</p> <p>Address Line 2: SUITE 3500</p> <p>Address Line 4: HOUSTON, TEXAS 77010</p>											
ATTORNEY DOCKET NUMBER:	05516/621002										
NAME OF SUBMITTER:	MINH S. THACH										
Signature:	/JEFFREY S. BERGMAN/										
Date:	02/19/2014										

PATENT

Total Attachments: 4

source=621002assignment#page1.tif

source=621002assignment#page2.tif

source=621002assignment#page3.tif

source=621002assignment#page4.tif

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:

METHOD OF USING SPRING LOADED BLOCKER TO RETAIN ROLLING CUTTERS OR MECHANICAL LOCK CUTTERS

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:

2/17/14
Date

Inventor Signature: _____

Print or Type Name: Chen Chen

[Signature]

Notary Public

State of: Texas

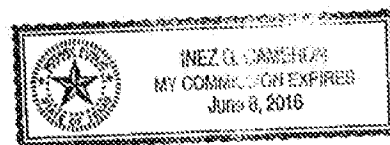
County of: Harris

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: 2/17/14

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.: 14/081,593
Filing Date: November 15, 2013

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

2/11/2014
Date

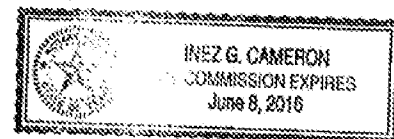
Inventor Signature: [Signature]
Print or Type Name: Yuri Burhan

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: 2/11/14
Notary Public I. Cameron 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.: 14/081,593
Filing Date: November 15, 2013

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

2/17/14
Date

Inventor Signature:

Print or Type Name:

J Shi
Jibin Shi

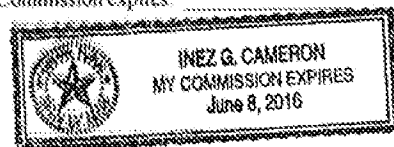
Notary Public

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: 2/17/14

Inez G. Cameron
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.: 14/081,593
Filing Date: November 15, 2013