

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5447383

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	YAHUA BAO	12/15/2017
	JOHN DANIEL BELNAP	12/15/2017
	GREGORY CARON	01/02/2018
	FENG YU	12/14/2017
	CHENG PENG	12/15/2017
	MICHAEL DAVID FRANCE	12/19/2017
	JOHN PARKER	03/25/2019
	ANATOLIY GARAN	12/15/2017
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:	16061669
CORRESPONDENCE DATA		
Fax Number:		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>		
Email:	kdumas-scarber@slb.com	
Correspondent Name:	KRISTINE DUMAS-SCARBER	
Address Line 1:	10001 RICHMOND AVENUE	
Address Line 2:	ROOM 4720	
Address Line 4:	HOUSTON, TEXAS 77042	
ATTORNEY DOCKET NUMBER:	IS12.3413-US-PCT	
NAME OF SUBMITTER:	KRISTINE DUMAS-SCARBER	
SIGNATURE:	/KRISTINE DUMAS-SCARBER/	

DATE SIGNED:	03/29/2019
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Total Attachments: 11

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Assignment

WHEREAS, the undersigned inventors hereinafter referred to as the "Inventors," each said Inventor being listed below:

Yahua Bao, a citizen of Canada;

John Daniel Belnap, a citizen of the United States of America;

Gregory Caron, a citizen of the United States of America;

Feng Yu, a citizen of China;

Cheng Peng, a citizen of China;

Michael David France, a citizen of the United States of America;

John Parker, a citizen of the United States of America; and

Anatoliy Garan, a citizen of the Ukraine;

Has/have invented certain new and useful improvements in

MECHANICAL LOCKING OF CUTTING ELEMENT WITH CARBIDE MATRIX

as described and set forth in an application identified as International Application No. **PCT/US2016/066701**, (Docket No. **IS12.3413-WO-PCT**) filed **December 14, 2016**. This assignment is effective as of **December 14, 2016**.

AND WHEREAS, the "COMPANIES", listed in **Schedule A**, are desirous of acquiring or confirming their acquisition of the entire right, title and interest in and to said invention, inventions or improvements, and in and to said application, and in and to any and all patents, both of the United States and of all foreign countries, that may be obtained therefore as outlined in **Schedule A**;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, BE IT KNOWN, that the undersigned Inventors, for good and valuable considerations, the receipt and sufficiency of which hereby acknowledge, have sold, assigned, transferred and conveyed, and by this assignment do sell, assign, transfer and convey, unto said **COMPANIES**, their successors and assigns, the entire right, title and interest throughout the world, in and to the above-described invention, inventions or improvements described or set forth in said application, in any form or embodiment thereof, and in and to said application, and in and to any applications filed in any foreign country based thereon, including the right to file foreign applications under the provisions of any convention or treaty; and in and to any confirmation, divisional, continuation, continuation-in-part, or substitute application which may be filed on said invention, inventions or improvements in the United States or in any foreign country; and in and to any and all patents,

certificates, utility models, reissues, extensions, additions or confirmations thereof which may be granted in the United States or in any foreign country upon said invention, inventions or improvements,

TO HAVE AND TO HOLD the same to the full end of the term or terms for which any and all such United States and foreign patents and grants may be issued on said invention, inventions or improvements.

AND said Inventors do hereby authorize and request the issuing authority to issue any and all of said United States and foreign patents on said application or applications to said **COMPANIES**, their successors and assigns, as the assignee of the entire right, title and interest in and to the same, for the sole use and benefit of said **COMPANIES**, their successors and assigns.

AND said Inventors do hereby covenant and warrant that said Inventors have full right to convey the entire right, title and interest herein assigned free and clear of all licenses, encumbrances and liens whatsoever, and that no said Inventors has executed and will execute any instruments in conflict herewith.

AND said Inventors, for the conditions aforesaid, do hereby covenant and agree to and with the said **COMPANIES**, their successors and assigns, that each Inventor, his or her executors, administrators, or other personal representatives, shall and will do all lawful acts and things, make all rightful oaths, and make, execute and deliver any and all other instruments in writing, and any and all further applications, papers, powers, affidavits, assignments, disclaimers and other documents, which in the opinion of counsel for said **COMPANIES**, their successors and assigns, may be required or necessary in this or in any foreign country more effectually to secure to and vest in said **COMPANIES**, their successors and assigns, the entire right, title and interest in and to said invention, inventions or improvements, application or applications, patents, rights, titles, benefits, privileges, and advantages hereby sold, assigned, confirmed, transferred and conveyed.

This Agreement is entered in contemplation of and shall be construed in accordance with the laws of the State of Texas, and may not be amended or modified unless in a subsequent writing executed by the **COMPANIES**.

IN WITNESS WHEREOF I, **Yahua Bao**, have hereunto set my hand and seal this 15 day of December, 2017.

Yahua Bao
Yahua Bao

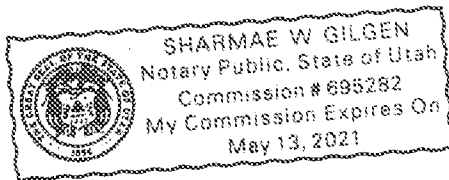
STATE OF UTAH

COUNTY OF UTAH

BEFORE ME this 15th day of December, 2017, personally appeared **Yahua Bao**, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he/she executed the same of his/her own free will for the purpose therein expressed.

Seal

Sharmae W. Gilgen
Notary Public



IN WITNESS WHEREOF I, **John Daniel Belnap**, have hereunto set my hand and seal this
15 day of Dec, 2017.

John Daniel Belnap
John Daniel Belnap

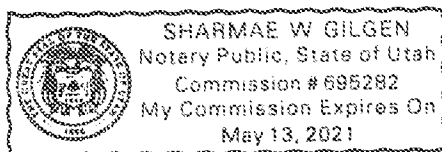
STATE OF UTAH

COUNTY OF UTAH

BEFORE ME this 15th day of December, 2017, personally appeared **John Daniel Belnap**, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he/she executed the same of his/her own free will for the purpose therein expressed.

Seal

Sharmae W. Gilgen
Notary Public



IN WITNESS WHEREOF I, **Gregory Caron**, have hereunto set my hand and seal this 2 day
of January, 2018.

Gregory C Caron
Gregory Caron

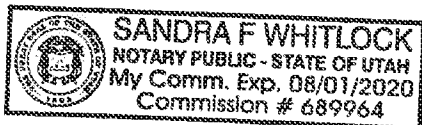
STATE OF UTAH

COUNTY OF UTAH

BEFORE ME this 2nd day of January, 2018, personally appeared **Gregory Caron**,
to me known to be the person who is described in and who executed the foregoing assignment
instrument and acknowledged to me that he/she executed the same of his/her own free will for
the purpose therein expressed.

Seal

Sandra F Whitlock
Notary Public



IN WITNESS WHEREOF I, **Feng Yu**, have hereunto set my hand and seal this 14th day of December, 2017.

Feng Yu
Feng Yu

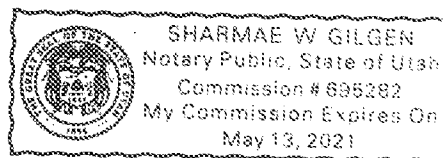
STATE OF UTAH

COUNTY OF UTAH


BEFORE ME this 14 day of December, 2017, personally appeared **Feng Yu**, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he/she executed the same of his/her own free will for the purpose therein expressed.

Seal

Sharmae W Gilgen
Notary Public



IN WITNESS WHEREOF I, **Cheng Peng**, have hereunto set my hand and seal this 15th day of December, 2017.



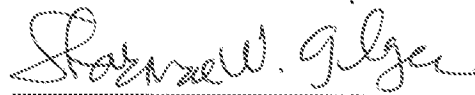
Cheng Peng

STATE OF UTAH

COUNTY OF UTAH

BEFORE ME this 15 day of December, 2017, personally appeared **Cheng Peng**, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he/she executed the same of his/her own free will for the purpose therein expressed.

Seal



Notary Public

IN WITNESS WHEREOF I, **Michael David France**, have hereunto set my hand and seal this
19 day of December, 2017.



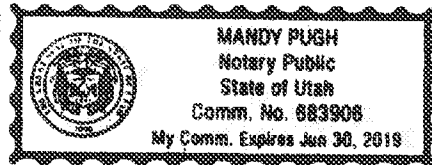
Michael David France

STATE OF UTAH

COUNTY OF UTAH

BEFORE ME this 19 day of December, 2017, personally appeared **Michael David France**, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he/she executed the same of his/her own free will for the purpose therein expressed.

Seal



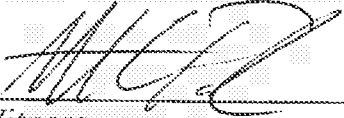


Notary Public

IN WITNESS WHEREOF I, **John Parker**, have hereunto set my hand and seal this 25 day of March, 2019.


John Parker

BE IT KNOWN, that **John Parker** is known to us to be the individual described in this assignment, that on the aforementioned date, we were personally present and did see him/her sign and execute this assignment and that he/she acknowledged to us that he/she executed the same as his/her free act and deed for the uses and purposes therein set forth.


Witness


MATTHEW PRICE

1021 W 300 S

SPANISH FORK UTAH

84660

Post Office Address


Witness

Kari Parker

1021 W 300 S

Spanish Fork, UT 84660

Post Office Address

IN WITNESS WHEREOF I, **Anatoliy Garan**, have hereunto set my hand and seal this
15 day of December, 2017.



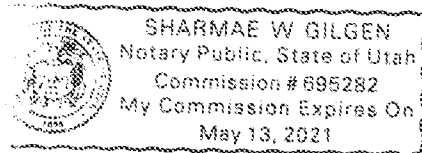
Anatoliy Garan

STATE OF UTAH

COUNTY OF UTAH

BEFORE ME this 15 day of December, 2017, personally appeared **Anatoliy Garan**,
to me known to be the person who is described in and who executed the foregoing assignment
instrument and acknowledged to me that he/she executed the same of his/her own free will for
the purpose therein expressed.

Seal





Notary Public

Schedule A
“COMPANIES”

Smith International, Inc.

Corporation of: Delaware

Located at: 1310 Rankin Road, Houston, Texas 77073, U.S.A.

Assignee for applications in: All throughout the World