505726818 10/17/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5773629

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MANOJ D. MAHAJAN	09/08/2016
CHARLES H. DEWEY	09/20/2016
SHANTANU N. SWADI	11/09/2016
WALTER E. FRIEDL	09/09/2016
CHRISTOPHER KANG POTTER	10/15/2019
ALAN FAIRWEATHER	10/15/2019

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:	14815174

CORRESPONDENCE DATA

Fax Number:

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.

Email:kdumas-scarber@slb.comCorrespondent Name:KRISTINE DUMAS-SCARBERAddress Line 1:10001 RICHMOND AVENUE

Address Line 2: ROOM 4720

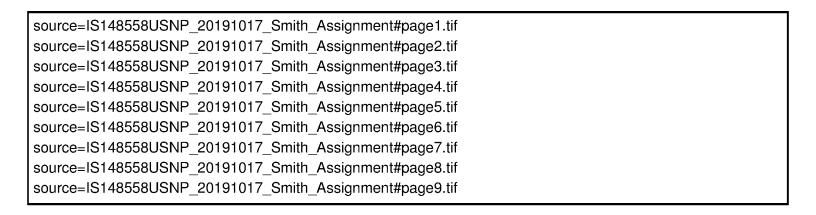
Address Line 4: HOUSTON, TEXAS 77042

ATTORNEY DOCKET NUMBER: IS14.8558-US-NP SMITH	
NAME OF SUBMITTER:	KRISTINE DUMAS-SCARBER
SIGNATURE:	/KRISTINE DUMAS-SCARBER/
DATE SIGNED:	10/17/2019

Total Attachments: 9

PATENT REEL: 050742 FRAME: 0717

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Assignment

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

Manoj D. Mahajan, a citizen of India;

Charles H. Dewey, a citizen of the United States of America;

Shantanu N. Swadi, a citizen of the United States of America;

Walter E. Friedl, a dual citizen of Columbia and Germany;

Christopher Kang Potter, a citizen of the United States of America;

and

Alan Fairweather, a citizen of the United Kingdom;

Has/have invented certain new and useful improvements in

MILLING TOOLS WITH A SECONDARY ATTRITION SYSTEM

as described and set forth in an application for Letters Patent of the United States of America, filed with the United States Patent and Trademark Office on July 31, 2015, Serial No. 14/815.174, (Docket No. IS14.8558-US-NP). This assignment is effective as of July 31, 2015.

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.

XX /)	ITN	TO CH	SED:	
VV.	1 1 1 3		31.1.1.	

Manoj IJ. Mahajan

STATE OF TEXAS

COUNTY OF HARRIS

BEFORE ME this ______ day of _______, 2016, personally appeared Manoj D. Mahajan, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

KRISTEN MARTIN
My Notary ID # 124137399
Expires March 3, 2018

Notary Public

WITNESSED:

IN WITNESS WHEREOF I, Charles H. Dewey, have hereunto set my hand and seal this 20** day of September. 2016.

STATE OF TEXAS

COUNTY OF HARRIS

BEFORE ME this 2016 day of 2016, personally appeared Charles H. Dewey, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

> KRISTEN MARTIN My Notary ID # 124137399 Expires March 3, 2018

33/1		WES	QT:	17.
33	3 8 1			32.

IN WITNESS WHEREOF I, Shantanu N. Swadi, have hereunto set my hand and seal this day of November, 2016.

Shahtanu N. Swadi

STATE OF TEXAS

COUNTY OF HARRIS

KRISTEN MARTIN
My Notary ID # 124137399
Expires March 3, 2018

Notary Public

WITNESSED:	
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IN WITNESS WHEREOF I, Walter E. Friedl, have hereunto set my hand and seal this day of soften sex 2016.

IN DOWN'

Walter E. Friedl

STATE OF TEXAS

COUNTY OF HARRIS

BEFORE ME this _____ day of ______, 2016, personally appeared Walter E. Friedl, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.

KRISTEN MARTIN
My Notary ID # 124137399
Expires March 3, 2018

Notary Public

WITNESSED:
IN WITNESS WHEREOF I, Christopher Kang Potter, have hereunto set my hand and seal this day of october, 2019. Christopher Kang Potter
STATE OF Grord a
BEFORE ME this 4 day of October. 2019, personally appeared Christopher Kang Potter, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.
Seal A Notary Public Notary Notary Notary Public Notary No

IN WITNESS WHEREOF L Alan Fairweather day of	r, have hereumo set my hand and seal this Alan Fairweather
foregoing assignment, that on the aforemention	me known to be the individual described in the old date. I was personally present and did see him that he did acknowledge to me that he executed dipurposes therein set forth.
KIRSTIE MEADLAY - CHAL MERG Wilness	Witness
YW GIRKOALL PARADE	
ABERDEEN	
ABIC SON	
Post Office Address	Post Office Address

Schlumberger-Private

Schedule A "COMPANIES"

SMITH INTERNATIONAL, INC.

Corporation of: United States of America
Located at: 1310 Rankin Road, Houston, TX 77073 U.S.A.
Assignee for applications in: United States of America

SCHLUMBERGER CANADA LIMITED

Corporation of: Canada

Located at: 125 - 9 Avenue SE, Calgary, Alberta T2G 0P6

Assignee for applications in: Canada

SERVICES PETROLIERS SCHLUMBERGER

Corporation of: France

Located at: 42 rue Saint Dominique, 75007 Paris, France

Assignee for applications in: France

SCHLUMBERGER HOLDINGS LIMITED

Corporation of: British Virgin Islands

Located at: P.O. Box 71, Craigmuir Chambers, Road Town, 1110 Tortola, British Virgin Islands

Assignee for applications in: Japan, The Netherlands, United Kingdom

PRAD RESEARCH AND DEVELOPMENT LIMITED

Corporation of: British Virgin Islands

Located at: P.O. Box 71, Craigmuir Chambers, Road Town, 1110 Tortola, British Virgin Islands Assignee for applications in: Angola, Bahrain, Bangladesh, Benin, Cambodia, Cameroon, Chad, China, Congo, Gabon, Ghana, Guinea-Bissau, India, Ivory Coast, Jordan, Libya, Mauritania, Morocco, Mozambique, Myanmar, Namibia, Nigeria, Philippines, Senegal, Sudan, Syria, Taiwan, Togo, UAE, Vietnam, Zaire.

SCHLUMBERGER TECHNOLOGY B.V.

Corporation of: the Netherlands

RECORDED: 10/17/2019

Located at: Parkstraat 83-89, 2514 JG The Hague, The Netherlands

Assignee for applications in: GCC and all other countries not otherwise listed.