507237680 04/18/2022

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Shucai LI	04/11/2022
Bin LIU	04/07/2022
Xinji XU	04/01/2022
Lei CHEN	04/01/2022
Chao FU	04/01/2022
Lei HAO	04/01/2022

RECEIVING PARTY DATA

Name: Shandong University	
Street Address:	No.17923, Jingshi Road, Lixia District
City:	Jinan, Shandong
State/Country:	China
Postal Code:	250061

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17769909

CORRESPONDENCE DATA

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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.

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ATTORNEY DOCKET NUMBER: 220051

NAME OF SUBMITTER: ISABEL ZHONG

SIGNATURE: //sabel Zhong/

DATE SIGNED: 04/18/2022

PATENT REEL: 059625 FRAME: 0855

Total Attachments: 2 source=Assigndec#page1.tif source=Assigndec#page2.tif

PATENT REEL: 059625 FRAME: 0856

ASSIGNMENT (BEING FILED FOR DUAL PURPOSE UNDER 37 CFR 1.63(e)) For Application with Filing Date on or after September 16, 2012

ASSIGNMENT

	Insert	(1)	Shucai LI		(2)	Bin LIU
(1-8)	Legal Name(s)	(3)	Xinji XU		(4)	Lei CHEN
	of Inventor(s)	(5)	Chao FU		(6)	Lei HAO
		(7)			(8)	
		the un	dersigned, the rec		y of which are h	r good and valuable consideration paid to each of nereby acknowledged, each undersigned agrees to
(9)	Insert Name of Assignee	(9) SHANDONG UNIVERSITY				
(10)	Insert Address of Assignee	(10) No. 17923, Jingshi Road, Lixia District, Jinan, Shandong 250061, CHINA				
		(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as				
Insert Identification such as Title, Case Number, or Foreign		(11)				AY SOUND WAVE ADVANCED TUNNELING MACHINE
	Application Number	2 A 44		220051		TI A constitution to the second
		(Attor	ney Docket No.	220051), 1	illed on even date herewith or as
(12)	Alternative	(12)	U.S. Application	ı Number		
	Identification for					
	filed applications	filed				

- 1) Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.
- 2) Each undersigned agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning any application or patent for the invention and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.
- 3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
- 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.
- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all patents resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.
- 6) Each undersigned hereby grants the firm of OLIFF PLC 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 recordation of this document.

(13) Declaration

As an above named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

The application was made or authorized to be made by me.

I have reviewed and understand the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR §1.56.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

PATENT REEL: 059625 FRAME: 0857

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	The second secon	e the underswilling herbers.

Date	2027.4.11	Inventor Signature	Shucai Li	(SEAL)
Date	2027.4.7	Inventor Signature	Bin LIU	. (SEAL)
Date	2022. 4.1	Inventor Signature	Xinji XU Xinji XU	(SEAL)
Date	<u>>0>> 0. </u>	Inventor Signature	Lei CHEN	(SEAL)
Date	2022.4.	Inventor Signature	Chao FU Chao FU	_ (SEAL)
Date	2022.4.	Inventor Signature	Lei HAO	_ (SEAL)
Date		Inventor Signature		_ (SEAL)
Date		Inventor Signature		_ (SEAL)
outsid	This assignment should preferebly be a the U.S.A. If neither, then it should be	signed before: (a) a a signed before at le	Notary Public if within the U.S.A. (b) a U.S. C ast two witnesses who also sign here:	onsul if
Date		Witness		
Date		Witness		