PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7823314

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHAOBIN HU	02/23/2023
YUKANG CAI	02/23/2023
LINGZHI XI	02/23/2023
HUAI YANG	02/23/2023
ZHENGYONG YAN	02/23/2023
SHUOGANG PANG	02/23/2023
QIANG ZHANG	02/23/2023
CHEN LI	02/23/2023
LIN ZHANG	02/23/2023

RECEIVING PARTY DATA

Name:	HOHAI UNIVERSITY
Street Address:	NO.1, XIKANG ROAD, GULOU DISTRICT, NANJING,
City:	JIANGSU
State/Country:	CHINA
Postal Code:	210024
Name:	POWERCHINA HUADONG ENGINEERING CORPORATION LIMITED
Name: Street Address:	POWERCHINA HUADONG ENGINEERING CORPORATION LIMITED NO.22, CHAOWANG ROAD, HANGZHOU,
Street Address:	NO.22, CHAOWANG ROAD, HANGZHOU,

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	17745882	

CORRESPONDENCE DATA

Fax Number: (949)391-4699

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.

Phone: 886223692800
Email: usa@jcipgroup.com

PATENT 507776186 REEL: 062848 FRAME: 0772

Correspondent Name: JCIPRNET

Address Line 1: 8F-1, NO. 100, ROOSEVELT RD. SEC. 2,

Address Line 4: TAIPEI, TAIWAN 100404

ATTORNEY DOCKET NUMBER: 121947-US-PA

NAME OF SUBMITTER: JAI-WEI CHEN

SIGNATURE: /Jai-Wei Chen/

DATE SIGNED: 03/02/2023

Total Attachments: 4

source=121947_del-assn#page1.tif source=121947_del-assn#page2.tif source=121947_del-assn#page3.tif source=121947_del-assn#page4.tif

> PATENT REEL: 062848 FRAME: 0773

DECLARATION AND ASSIGNMENT

FOR UTILITY OR DESIGN PATENT APPLICATION

Declaration Submitted With Initial Filing					
OR					
☐ Declaration Submitted After Initial Filing (surcharge 37 CFR 1.16(f) required)					
(Title of the Invention)					
SUPERCRITICAL FLUID DRILLING AND BLASTING INTEGRATED DOUBLE-ARM DRILL JUMBO AND CONTROL METHOD THEREOF					
As a below named inventor (hereinafter designated as the undersigned), I hereby					
declare that:					
This declaration is directed to:					
The attached application,					
OR					
☐ United States Application Number or PCT International application number					
Filed on2022/05/17					
The above-identified application was made or authorized to be made by me.					
I believe I am the original inventor or an original joint inventor of a claimed invention in the application.					

The undersigned 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.

- 1 -

DECLARATION AND ASSIGNMENT

FOR UTILITY OR DESIGN PATENT APPLICATION

WHEREAS, the undersigned has invented certain new and useful improvements described in the application identified.

WHEREAS, 1. HOHAI UNIVERSITY

of No.1, Xikang Road, Gulou District, Nanjing, Jiangsu 210024, China

2. POWERCHINA Huadong Engineering Corporation Limited of No.22, Chaowang Road, Hangzhou, Zhejiang 310014 China

hereinafter referred to as ASSIGNEE, is desirous of acquiring the undersigned's interest in the said invention and application and in any U.S. Letters Patent which may be granted on the same:

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged by the undersigned, the undersigned has/have sold, assigned and transferred, and by these presents does/do sell, assign and transfer unto the said Assignee, and Assignee's successors and assigns, all his/her/their rights, title and interest in and to the said invention and application and all future improvements thereon, and in and to any Letters Patent which may hereafter be granted on the same in the United States, the said rights, title and interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said the undersigned had this Assignment and transfer not been made, to the full end and term of any Letters Patent which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

The undersigned further agrees/agree that he/she/they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee Lawfully may request, to obtain or maintain Letters Patent for said invention and improvement, and to vest title thereto in said Assignee, or Assignee's successors and assigns.

- 2 -

DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

Signature: Shao bin HU	_Date:_	Feb. 23.2023		
Legal Name of Sole or First Inventor: Shaobin HU				
Residence: Jiangsu, China				
Mailing Address: No.1, Xikang Road, Gulou District, Nanjing, Jia	angsu 22	0024, China		
Signature: Yukang Ca;	Date:	Feb. 23, 2023		
Legal Name of Additional Joint Inventor, if any: Yukang CAI				
Residence: Jiangsu, China				
Mailing Address: No.1, Xikang Road, Gulou District, Nanjing, Jia	angsu 22	20024, China		
Signature: /ing zhi XI	Date:_	Feb. 23, 2023		
Legal Name of Additional Joint Inventor, if any: lingzhi XI				
Residence: Zhejiang, China				
Mailing Address: No.22, Chaowang Road, Hangzhou, Zhejiang	310014	China		
Signature: huaj YANG	Date:_	Feb. 23. 2023		
Legal Name of Additional Joint Inventor, if any: huai YANG				
Residence: Zhejiang, China				
Mailing Address: No.22, Chaowang Road, Hangzhou, Zhejiang	310014	China		
선택하다 하는 1000 mm (1997) 선택하는 4명 및 1997 (1997)				
Signature: Weng yang Yan	Date:_	Feh. 23. 2023		
Legal Name of Additional Joint Inventor, if any: Zhengyong YA	N.			
Residence: Jiangsu, China				
Malling Address: No.1, Xikang Road, Gulou District, Nanjing, Ji	angsu 22	20024, China		

WDCL22030-US-PA 121947-US-PA

DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

Signature: Shuogang PANG Date:	Feb. 23. 2023
Legal Name of Additional Joint Inventor, if any: Shuogang PANG	
Residence: Jiangsu, China	
Mailing Address: No.1, Xikang Road, Gulou District, Nanjing, Jiangsu 22	20024. China
Signature: 91 ang Zhang Date:	Teb. 23. 2023
Legal Name of Additional Joint Inventor, if any: qiang ZHANG	,
Residence: Zhejiang, China	
Mailing Address: No.22, Chaowang Road, Hangzhou, Zhejiang 310014 (China
Signature: Chen Li Date:	2023. 2.75
Legal Name of Additional Joint Inventor, if any: chen Li	
Residence: Zhejiang, China	
Mailing Address: No.22, Chaowang Road, Hangzhou, Zhejiang 310014 (hina
	zinia :
Signature:	Jes. 23. 2023
Legal Name of Additional Joint Inventor, if any: Lin ZHANG	
Residence: Jiangsu, China	
Mailing Address: No.1, Xikang Road, Gulou District, Nanjing, Jiangsu 220	0024, China

- 4 -