507040874 12/22/2021

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YUANYAN CHEN	11/12/2021
ROBERT P. DARBE	11/10/2021
NAZLI DEMIRER	11/19/2021
KHUNSA HISHAM	12/08/2021
SHAHIN TASOUJIAN	11/13/2021

RECEIVING PARTY DATA

Name:	HALLIBURTON ENERGY SERVICES, INC.
Street Address:	3000 N. SAM HOUSTON PARKWAY E.
City:	HOUSTON
State/Country:	TEXAS
Postal Code:	77032-3219

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	17546906
PCT Number:	US2021064718

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.

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Email: ctumey@ctumeylawgroup.com

Correspondent Name: C. TUMEY LAW GROUP, PLLC - HES

Address Line 1: P.O. BOX 890226

Address Line 4: HOUSTON, TEXAS 77062-9998

ATTORNEY DOCKET NUMBER:	1560-129300 AND 129301	
NAME OF SUBMITTER:	COREY TUMEY	
SIGNATURE:	/Corey Tumey/	
DATE SIGNED:	12/21/2021	

Total Attachments: 6

PATENT REEL: 058455 FRAME: 0616

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ASSIGNMENT

Whereas, We, Yuanyan Chen, Robert P. Darbe, Nazli Demirer, Khunsa Hisham, and Shahin Tasoujian ("ASSIGNORS"), have invented ERROR-SPACE FEEDBACK CONTROLLER FOR DRILL BIT STEERING, and

Whereas, **Halliburton Energy Services, Inc.**, a Delaware Corporation having a place of business at 3000 N. Sam Houston Parkway E., Houston, Texas 77032-3219, United States of America (sometimes hereinafter called "ASSIGNEE"), is desirous of acquiring an interest therein,

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, We do hereby ASSIGN, SELL and CONVEY to said **Halliburton Energy Services**, **Inc.**, its successors and assigns, the entire right, title and interest throughout the world in and to:

- 1. Said invention in ERROR-SPACE FEEDBACK CONTROLLER FOR DRILL BIT STEERING,
- 2. United States Patent application on said invention, Application No. 17/546,906, filed December 9, 2021, entitled ERROR-SPACE FEEDBACK CONTROLLER FOR DRILL BIT STEERING, Halliburton Reference No. 2021-INV-110410-US01; (The undersigned hereby grant(s) the firm of C. Tumey Law Group, PLLC of 1150 Clear Lake City Blvd., Suite 201, Houston, Texas 77062 the power to insert on this assignment any further identification, including the application number and filing date, which 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);
- 3. All applications for patent or like protection on said invention that have now been or may in the future be made by me or my legal representatives, including any continuation, continuation-in-part and any other utility applications that may be based on this invention, whether in the United States of America or in any other country or place anywhere in the world;
- 4. All patents and like protection that have now been or may in the future be granted on said invention to me or my legal representatives, whether in the United States of America or in any other country or place anywhere in the world;
- 5. All substitutions for and divisions, continuations, continuations-in-part, renewals, reissues, extensions, and the like of said applications and patents and like grants, including without limitation, those obtained or permissible under past, present and future laws and statutes;
- 6. All rights of action on account of past, present and future unauthorized use of said invention and for infringement of said patents and like protection;
- 7. The right in ASSIGNEE to file in its name applications for patents and like protection for said invention in any country or countries foreign to the United States; and

Page 2 of 6 CTLG Ref. No. 1560-129300 HES Ref. No. 2021-INV-110410-US01

protection and we covenant that we, and our executors, will, at the expense of ASSIGNEE, its s	riated with said invention, applications, patents and like heirs, legal representatives, assigns, administrators, and successors and assigns, execute all papers and perform such ASSIGNEE, its successors and assigns, the full benefit of
Executed this 12 th day of Nov	, 2021
	Yuanyan Chen
STATE OF TEXAS) COUNTY OF HUNIS)	
	hen and acknowledged the foregoing instrument to be his 2, 2021. (Notary)
(Witness's Name)	(Witness's Signature)
WITNESS CONTACT INFORMATION: In the presence of:	(Witness's Full Address)
(Witness's Name)	(Witness's Signature)
WITNESS CONTACT INFORMATION:	(Witness's Full Address)

Page 3 of 6 CTLG Ref. No. 1560-129300 HES Ref. No. 2021-INV-110410-US01

Executed this 11th day of November	
	Robert P. Darbe
STATE OF TEXAS) ss COUNTY OF HAVIS	
Before me personally appeared said Robert P. Da free act and deed this to the day of the last the free act and deed this to the day of the last the	rbe and acknowledged the foregoing instrument to be his, 2021.
Seal SHANON HALL Notary Public, State of Texas Comm. Expires 12-19-2022 Notary ID 130058729 In the presence of:	(Notary)
(Witness's Name)	(Witness's Signature)
WITNESS CONTACT INFORMATION: In the presence of:	(Witness's Full Address)
(Witness's Name)	(Witness's Signstrure)
WITNESS CONTACT INFORMATION:	(Witness's Full Address)

Page 4 of 6 CTLG Ref. No. 1560-129300 HES Ref. No. 2021-INV-110410-US01

Executed this 19th day of Navember	
	Nash Demirer
STATE OF TEXAS) SS COUNTY OF Harris ?	
Before me personally appeared said Nazli Demi free act and deed this day of November Seal OR Nation 12 13 13 15 83 27	rer and acknowledged the foregoing instrument to be h
(Witness's Name)	(Witness's Signature)
WITNESS CONTACT INFORMATION: In the presence of:	(Witness's Full Address)
(Witness's Name)	(Witness's Signature)
WITNESS CONTACT INFORMATION:	(Witness's Full Address)

Page 5 of 6 CTLG Ref. No. 1560-129300 HES Ref. No. 2021-INV-110410-US01

Executed this 6th day of Decem	LCA, 2021
	Klumsa Hisham
STATE OF TEXAS) COUNTY OF HACKIS)	
Before me personally appeared said Khunsa His free act and deed this Blay of December Connector (Connector to 130206203 My Commission Expires May 1, 2023	ham and acknowledged the foregoing instrument to be, 2021.
In the presence of:	
(Witness's Name)	(Witness's Signature)
WITNESS CONTACT INFORMATION: In the presence of:	(Witness's Full Address)
(Witness's Name)	(Witness's Signature)
WITNESS CONTACT INFORMATION:	(Witness's Full Address)

Executed this 13 day of November	, 2021	
	Shahin Tasoyjian	
	Shahin Tasoujian	
STATE OF (exas)		
COUNTY OF Harris) ss		
Before me personally appeared said Shahin Tase his free act and deed this 13 day of Nove	pujian and acknowledged the foregoing \(\simes \) \(\simes \), 2021.	instrument to be
Seal EDEN VILLARREAL Notary Public		
STATE OF TEXAS My Comm. Exp. 12-02-24 Notary ID # 12672070-0	(Notary)	
In the presence of:		
(Witness's Name)	(Witness's Signature)	
WITNESS CONTACT INFORMATION:	(W/thank Paul Add	
In the presence of:	(Witness's Full Address)	
(Witness's Name)	(Witness's Signature)	
WITNESS CONTACT INFORMATION:	(Witness's Full Address)	

RECORDED: 12/22/2021