

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7892038

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
OIL STATES ENERGY SERVICES, L.L.C.	04/07/2023
OIL STATES INDUSTRIES, INC.	04/07/2023
GEODYNAMICS, INC.	04/07/2023
RECEIVING PARTY DATA	
Name:	WELLS FARGO BANK, NATIONAL ASSOCIATION
Street Address:	1100 ABERNATHY ROAD, SUITE 1600
City:	ATLANTA
State/Country:	GEORGIA
Postal Code:	30328
PROPERTY NUMBERS Total: 32	
Property Type	Number
Patent Number:	11280147
Patent Number:	11428088
Patent Number:	11187603
Patent Number:	11236576
Patent Number:	11268357
Patent Number:	11280166
Patent Number:	11286758
Patent Number:	11326421
Patent Number:	11333003
Patent Number:	11333009
Patent Number:	11359449
Patent Number:	11359898
Patent Number:	11384625
Patent Number:	11384626
Application Number:	17839901
Application Number:	17735584
Application Number:	17497037
Application Number:	17513095

Property Type	Number
Application Number:	17666065
Application Number:	17740952
Application Number:	17835353
Application Number:	17424668
Application Number:	17742592
Application Number:	17330699
Application Number:	17500111
Application Number:	17389482
Application Number:	17189366
Application Number:	17566107
Application Number:	17341571
Application Number:	17443701
Application Number:	17500121
Application Number:	17467544

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: richardsonan@gtlaw.com
Correspondent Name: ANDREW RICHARDSON
Address Line 1: 3333 PIEDMONT ROAD NE
Address Line 2: SUITE 2500
Address Line 4: ATLANTA, GEORGIA 30305

ATTORNEY DOCKET NUMBER:	103274.042800
NAME OF SUBMITTER:	ANDREW RICHARDSON
SIGNATURE:	/Andrew Richardson/
DATE SIGNED:	04/10/2023

Total Attachments: 8

source=OIS PATENT SECURITY AGREEMENT (Executed 2023.04.07)#page1.tif
source=OIS PATENT SECURITY AGREEMENT (Executed 2023.04.07)#page2.tif
source=OIS PATENT SECURITY AGREEMENT (Executed 2023.04.07)#page3.tif
source=OIS PATENT SECURITY AGREEMENT (Executed 2023.04.07)#page4.tif
source=OIS PATENT SECURITY AGREEMENT (Executed 2023.04.07)#page5.tif
source=OIS PATENT SECURITY AGREEMENT (Executed 2023.04.07)#page6.tif
source=OIS PATENT SECURITY AGREEMENT (Executed 2023.04.07)#page7.tif
source=OIS PATENT SECURITY AGREEMENT (Executed 2023.04.07)#page8.tif

PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT (this “Patent Security Agreement”) is made this 7th day of April, 2023, by and among the Grantors listed on the signature pages hereof (collectively, jointly and severally, “Grantors” and each individually “Grantor”), and **WELLS FARGO BANK, NATIONAL ASSOCIATION**, a national banking association (“Wells Fargo”), in its capacity as administrative agent for each member of the Lender Group (as defined in the Credit Agreement (as defined below)) and the Bank Product Providers (as defined in the Credit Agreement) (in such capacity, together with its successors and assigns in such capacity, “Agent”).

W I T N E S S E T H:

WHEREAS, pursuant to that certain Credit Agreement dated as of February 10, 2021 (as amended, restated, supplemented, or otherwise modified from time to time, the “Credit Agreement”), by and among **OIL STATES INTERNATIONAL, INC.**, a Delaware corporation (“OIS”), as a Borrower (as defined therein), the other Borrowers from time to time party thereto, the Lenders (as defined therein) from time to time party thereto, and Agent, the Lender Group has agreed to make certain financial accommodations available to Borrowers from time to time pursuant to the terms and conditions thereof;

WHEREAS, the members of the Lender Group and the Bank Product Providers are willing to make the financial accommodations to Borrowers as provided for in the Credit Agreement, the other Loan Documents, and the Bank Product Agreements, but only upon the condition, among others, that the Grantors shall have executed and delivered to Agent, for the benefit of the Lender Group and the Bank Product Providers, that certain Guaranty and Security Agreement dated as of February 10, 2021 (including all annexes, exhibits or schedules thereto, as from time to time amended, restated, supplemented or otherwise modified, the “Guaranty and Security Agreement”); and

WHEREAS, pursuant to the Guaranty and Security Agreement, Grantors are required to execute and deliver to Agent, for the benefit of the Lender Group and the Bank Product Providers, this Patent Security Agreement.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Grantor hereby agrees as follows:

1. **DEFINED TERMS.** All initially capitalized terms used but not otherwise defined herein have the meanings given to them in the Guaranty and Security Agreement or, if not defined therein, in the Credit Agreement, and this Patent Security Agreement shall be subject to the rules of construction set forth in Section 1(b) of the Guaranty and Security Agreement, which rules of construction are incorporated herein by this reference, *mutatis mutandis*.

2. **GRANT OF SECURITY INTEREST IN PATENT COLLATERAL.** Each Grantor hereby unconditionally grants, collaterally assigns, and pledges to Agent, for the benefit each member of the Lender Group and each of the Bank Product Providers, to secure the Secured Obligations, a continuing security interest (referred to in this Patent Security Agreement as the

“Security Interest”) in all of such Grantor’s right, title and interest in and to the following, whether now owned or hereafter acquired or arising (collectively, the “Patent Collateral”):

(a) all of its Patents and Patent Intellectual Property Licenses to which it is a party including those referred to on Schedule I; and

(b) all products and proceeds of the foregoing, including any claim by such Grantor against third parties for past, present or future infringement of any Patent or any Patent exclusively licensed under any Intellectual Property License, including the right to receive damages, or right to receive license fees, royalties, and other compensation under any Patent Intellectual Property License.

3. SECURITY FOR SECURED OBLIGATIONS. This Patent Security Agreement and the Security Interest created hereby secures the payment and performance of the Secured Obligations, whether now existing or arising hereafter.

4. SECURITY AGREEMENT. The Security Interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interests granted to Agent, for the benefit of the Lender Group and the Bank Product Providers, pursuant to the Guaranty and Security Agreement. Each Grantor hereby acknowledges and affirms that the rights and remedies of Agent with respect to the Security Interest in the Patent Collateral made and granted hereby are more fully set forth in the Guaranty and Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. To the extent there is any inconsistency between this Patent Security Agreement and the Guaranty and Security Agreement, the Guaranty and Security Agreement shall control.

5. COUNTERPARTS. This Patent Security Agreement is a Loan Document. This Patent Security Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken together, shall constitute but one and the same Patent Security Agreement. Execution of any such counterpart may be by means of (a) an electronic signature that complies with the federal Electronic Signatures in Global and National Commerce Act, state enactments of the Uniform Electronic Transactions Act, or any other relevant and applicable electronic signatures law; (b) an original manual signature; or (c) a faxed, scanned, or photocopied manual signature. Each electronic signature or faxed, scanned, or photocopied manual signature shall for all purposes have the same validity, legal effect, and admissibility in evidence as an original manual signature. Agent reserves the right, in its discretion, to accept, deny, or condition acceptance of any electronic signature on this Patent Security Agreement. Any party delivering an executed counterpart of this Patent Security Agreement by faxed, scanned or photocopied manual signature shall also deliver an original manually executed counterpart, but the failure to deliver an original manually executed counterpart shall not affect the validity, enforceability, and binding effect of this Patent Security Agreement.

6. CHOICE OF LAW AND VENUE, JURY TRIAL WAIVER. THIS PATENT SECURITY AGREEMENT SHALL BE SUBJECT TO THE PROVISIONS REGARDING CHOICE OF LAW AND VENUE AND JURY TRIAL WAIVER SET FORTH IN SECTION 25

OF THE GUARANTY AND SECURITY AGREEMENT, AND SUCH PROVISIONS ARE INCORPORATED HEREIN BY THIS REFERENCE, *MUTATIS MUTANDIS*.

[Continued on following page.]

IN WITNESS WHEREOF, the parties hereto have caused this Patent Security Agreement to be executed and delivered as of the day and year first above written.

GRANTORS:


**OIL STATES ENERGY SERVICES,
L.L.C.**

By: 

Name: Lloyd A. Hajdik

Title: Vice President & Treasurer

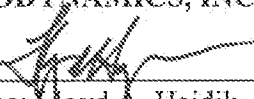
OIL STATES INDUSTRIES, INC.

By: 

Name: Lloyd A. Hajdik

Title: Vice President and Treasurer

GEODYNAMICS, INC.

By: 

Name: Lloyd A. Hajdik

Title: Vice President and Assistant Treasurer

[OIS---PATENT SECURITY AGREEMENT]

PATENT
REEL: 063270 FRAME: 0613

ACCEPTED AND ACKNOWLEDGED BY:

AGENT:

**WELLS FARGO BANK, NATIONAL
ASSOCIATION**, a national banking
association, as Agent

By: _____

Name: Christopher Waterstreet

Title: Authorized Signatory

[OIS—PATENT SECURITY AGREEMENT]

PATENT
REEL: 063270 FRAME: 0614

SCHEDULE I
to
PATENT SECURITY AGREEMENT

Patents

Registrations:

Owner	Registration Number	Description
Oil States Energy Services, L.L.C.	11,280,147	IMPROVED MANDREL HEAD FOR WELLHEAD ISOLATION TOOL
	11,428,088	FRAC MANIFOLD ISOLATION TOOL
Oil States Industries, Inc.	11,187,603	VRMT FOR DRILLING RISERS AND RISER TOWERS
GeoDynamics, Inc.	11,236,576	COMPLEX COMPONENTS FOR MOLDED COMPOSITE FRAC PLUGS
	11,268,357	CONSTANT ENTRANCE HOLE PERFORATING GUN SYSTEM AND METHOD
	11,280,166	ADDRESSABLE SWITCH ASSEMBLY FOR WELLBORE SYSTEMS AND METHOD
	11,286,758	WELLBORE GUN PERFORATING SYSTEM AND METHOD
	11,326,421	PROPPANT TRANSPORT EFFICIENCY SYSTEM AND METHOD
	11,333,003	OPENING A CASING WITH A HYDRAULIC-POWERED SETTING TOOL
	11,333,009	CONVERTIBLE AND ADDRESSABLE SWITCH ASSEMBLY FOR WELLBORE OPERATIONS
	11,359,449	CONTROLLED TIMING OF ACTUATED PLUG ELEMENT AND METHOD
	11,359,898	CURRENT FEED-THROUGH WIRELINE RELEASE TOOL AND METHOD

	11,384,625	DEVICE AND METHOD FOR ANGULARLY ORIENTATING WELLBORE PERFORATING GUNS
	11,384,626	MICRO-CONTROLLER-BASED SWITCH ASSEMBLY FOR WELLBORE SYSTEMS AND METHOD

Applications:

Owner	Application Number	Description
Oil States Energy Services, L.L.C.	20220307362	FRAC MANIFOLD ISOLATION TOOL
	20220259963	ZIPPER BRIDGE
	20220023919	FLOWBACK TANK CLEANING SYSTEM AND METHOD
GeoDynamics, Inc.	20220049586	HIGH DENSITY CLUSTER BASED PERFORATING SYSTEM AND METHOD
	20220162926	ADDRESSABLE SWITCH ASSEMBLY FOR WELLBORE SYSTEMS AND METHODS
	20220268562	CURRENT FEED THROUGH FOR TESTING OF DOWNHOLE TOOLS
	20220298896	MICRO-CONTROLLER-BASED SWITCH ASSEMBLY FOR WELLBORE SYSTEMS AND METHOD
	20220081999	ASYMMETRIC SHAPED CHARGES AND METHOD FOR MAKING ASYMMETRIC PERFORATIONS
	20220268149	VALVE STATUS INDICATOR DEVICE AND METHOD
	20220018224	MULTI-LAYER LOADING TUBE FOR PERFORATING GUN
	20220127936	LOW-DRAG PERFORATING GUN SCALLOPS AND METHOD
	20220034204	WELL PERFORATOR EVALUATION SYSTEM AND METHOD
	20220074719	ASYMMETRIC INITIATED SHAPED CHARGE AND

		METHOD FOR MAKING A SLOT-LIKE PERFORATION
	20220213766	NON-EXPLOSIVE CASING PERFORATING DEVICES AND METHODS
	20220034191	FRAC PLUG SLIPS WITH UNIFORM BREAKING MECHANISM AND METHOD
	20220034221	SWITCH DEVICE WITH NON-ADDRESSABLE SCHEME FOR WELLBORE OPERATIONS
	20220112802	PERFORATION CLUSTER DESIGN METHOD AND SYSTEM BASED ON A HYBRID MODEL TO PREDICT PROPPANT DISTRIBUTION
	20220251931	ONE-CLICK CONTACT DETONATOR FOR PERFORATING GUN SYSTEM

Patent Licenses

None.