PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7768570

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	PATENT SECURITY AGREEMENT (ABL)

CONVEYING PARTY DATA

Name	Execution Date
NINE ENERGY SERVICE, INC.	01/30/2023
NINE DOWNHOLE TECHNOLOGIES, LLC	01/30/2023
MAGNUM OIL TOOLS INTERNATIONAL, LTD.	01/30/2023

RECEIVING PARTY DATA

Name:	JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT
Street Address:	10 SOUTH DEARBORN
Internal Address:	FLOOR L2
City:	CHICAGO
State/Country:	ILLINOIS
Postal Code:	60603

PROPERTY NUMBERS Total: 68

Property Type	Number
Patent Number:	10400535
Patent Number:	8113276
Patent Number:	8336635
Patent Number:	9004160
Patent Number:	9915114
Patent Number:	8893780
Patent Number:	10487615
Patent Number:	11015415
Patent Number:	11365600
Patent Number:	11371312
Patent Number:	11459839
Patent Number:	11149522
Patent Number:	D703698
Patent Number:	8033333
Patent Number:	8079413
Patent Number:	8307892
Patent Number:	8899317

PATENT REEL: 062546 FRAME: 0076

507721424

Property Type	Number
Patent Number:	9194209
Patent Number:	9217319
Patent Number:	9291031
Patent Number:	9309744
Patent Number:	9388662
Patent Number:	9441448
Patent Number:	9500061
Patent Number:	9506309
Patent Number:	9587475
Patent Number:	D657807
Patent Number:	D672794
Patent Number:	D673182
Patent Number:	D673183
Patent Number:	D684612
Patent Number:	D694280
Patent Number:	D694281
Patent Number:	D694282
Patent Number:	D697088
Patent Number:	D698370
Patent Number:	D703713
Patent Number:	D705821
Patent Number:	9109428
Patent Number:	9127527
Patent Number:	9163477
Patent Number:	9181772
Patent Number:	10337279
Patent Number:	10352125
Patent Number:	10465462
Patent Number:	10465468
Patent Number:	10385649
Patent Number:	11098556
Patent Number:	10107070
Patent Number:	10887153
Patent Number:	10458201
Patent Number:	9850736
Patent Number:	9739114
Patent Number:	9850738
Patent Number:	7861785

Property Type	Number
Patent Number:	9062522
Patent Number:	9121240
Patent Number:	10260308
Patent Number:	10662732
Patent Number:	10871053
Application Number:	17233215
Application Number:	17648912
Application Number:	17662816
Application Number:	17808051
Application Number:	17410763
Application Number:	16259910
Application Number:	17809252
Application Number:	17504294

CORRESPONDENCE DATA

Fax Number: (212)455-2502

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: 2124552592 Email: jmull@stblaw.com

Correspondent Name: COURTNEY WELSHIMER 425 LEXINGTON AVENUE

Address Line 4: NEW YORK, NEW YORK 10017

ATTORNEY DOCKET NUMBER:	509265/2435
NAME OF SUBMITTER:	J. JASON MULL
SIGNATURE:	/J. Jason Mull/
DATE SIGNED:	01/30/2023

Total Attachments: 13

source=Nine Energy-JPM - Patent Security Agreement (ABL) [Executed]#page1.tif source=Nine Energy-JPM - Patent Security Agreement (ABL) [Executed]#page2.tif source=Nine Energy-JPM - Patent Security Agreement (ABL) [Executed]#page3.tif source=Nine Energy-JPM - Patent Security Agreement (ABL) [Executed]#page4.tif source=Nine Energy-JPM - Patent Security Agreement (ABL) [Executed]#page5.tif source=Nine Energy-JPM - Patent Security Agreement (ABL) [Executed]#page6.tif source=Nine Energy-JPM - Patent Security Agreement (ABL) [Executed]#page7.tif source=Nine Energy-JPM - Patent Security Agreement (ABL) [Executed]#page8.tif source=Nine Energy-JPM - Patent Security Agreement (ABL) [Executed]#page9.tif source=Nine Energy-JPM - Patent Security Agreement (ABL) [Executed]#page10.tif source=Nine Energy-JPM - Patent Security Agreement (ABL) [Executed]#page11.tif source=Nine Energy-JPM - Patent Security Agreement (ABL) [Executed]#page11.tif source=Nine Energy-JPM - Patent Security Agreement (ABL) [Executed]#page13.tif

GRANT OF SECURITY INTEREST IN PATENT RIGHTS

This GRANT OF SECURITY INTEREST IN PATENT RIGHTS ("Agreement"), effective as of January 30, 2023 is made by NINE ENERGY SERVICE, INC., a Delaware corporation, located at 2001 Kirby Drive, Suite 200, Houston, Texas 77019 (the "Borrower"), NINE DOWNHOLE TECHNOLOGIES, LLC, a Delaware limited liability company ("Nine Downhole"), located at 2001 Kirby Drive, Suite 200, Houston, Texas 77019, and MAGNUM OIL TOOLS INTERNATIONAL LTD., a Texas limited partnership, located at 2001 Kirby Drive, Suite 200, Houston, Texas 77019 ("Magnum" and, together with the Borrower and Nine Downhole, the "Grantors" and each a "Grantor"), in favor of JPMORGAN CHASE BANK, N.A., as Administrative Agent (in such capacity, the "Administrative Agent") for the ratable benefit of the Secured Parties (as defined in the Credit Agreement referred to below).

WITNESSETH:

WHEREAS, pursuant to the Credit Agreement dated as of October 25, 2018, as amended by that certain First Amendment to Credit Agreement dated as of January 30, 2023 (as the same may be further amended, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among the Borrower, Nine Energy Canada Inc. (the "Canadian Borrower"), the Lenders and Issuing Lenders party thereto from time to time, and the Administrative Agent, the Lenders have severally agreed to make extensions of credit to the Borrower upon the terms and subject to the conditions set forth therein;

WHEREAS, the Grantors, the Canadian Borrower, the Administrative Agent and the other parties party thereto from time to time have entered into the certain Intercreditor Agreement dated as of January 30, 2023 (as amended, amended and restated, supplemented or otherwise modified from time to time) with U.S. Bank Trust Company, National Association, as notes representative, in connection with the issuance of the Senior Secured Notes;

WHEREAS, in connection with the Credit Agreement and in consideration of the credit extended by the Lenders to the Borrower and the letters of credit issued by the Issuing Lenders for the account of the Borrower or any subsidiary of the Borrower, the Grantors and the other grantors party thereto have executed and delivered an Amended and Restated Pledge and Security Agreement, dated as of January 30, 2023, in favor of the Administrative Agent (as amended, supplemented, amended and restated or otherwise modified from time to time, the "Security Agreement"); and

WHEREAS, pursuant to the Security Agreement, each Grantor has duly authorized the execution, delivery and performance of this Agreement.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and in order to induce the Lenders to make extensions of credit to the Borrower pursuant to the Credit Agreement, each Grantor agrees as follows:

SECTION 1. <u>Definitions</u>. Unless otherwise defined herein or the context otherwise requires, terms used in this Agreement, including its preamble and recitals, have the meanings provided or provided by reference in the Credit Agreement or the Security Agreement, as applicable.

SECTION 2. <u>Grant of Security Interest</u>. Each Grantor hereby pledges, hypothecates assigns, charges, mortgages, delivers, and transfers to the Administrative Agent, for the ratable benefit of each Secured Party, and hereby grants to the Administrative Agent, for the ratable benefit of each Secured Party, a continuing security interest in all of such Grantor's right, title and interest in, to and under, all

<u>Patent Collateral</u> (as that term is defined in the Security Agreement), including, without limitation, those patents and patent applications listed on <u>Schedule A</u> attached hereto, as collateral security for the prompt and complete payment and performance when due (whether at the stated maturity, by acceleration or otherwise) of such Grantor's Secured Obligations.

SECTION 3. <u>Purpose</u>. This Agreement has been executed and delivered by each Grantor for the purpose of recording the grant of security interest herein with the United States Patent and Trademark Office and the Canadian Intellectual Property Office. The security interest granted hereby has been granted to the Administrative Agent in connection with the Security Agreement and is expressly subject to the terms and conditions thereof. The Security Agreement (and all rights and remedies of the Administrative Agent thereunder) shall remain in full force and effect in accordance with its terms.

SECTION 4. <u>Acknowledgment</u>. Each Grantor does hereby further acknowledge and affirm that the rights and remedies of the Administrative Agent with respect to the security interest in the Patent Collateral granted hereby are more fully set forth in the Credit Agreement and the Security Agreement, the terms and provisions of which (including the remedies provided for therein) are incorporated by reference herein as if fully set forth herein. In the event of any conflict between the terms of this Agreement and the terms of the Security Agreement, the terms of the Security Agreement shall govern.

SECTION 5. <u>Counterparts</u>. This Agreement may be executed by the parties hereto in several counterparts, each of which shall be deemed to be an original and all of which shall constitute together but one and the same agreement. Delivery of an executed counterpart of a signature page to this Agreement by facsimile or other electronic transmission shall be effective as delivery of a manually executed counterpart of this Agreement.

SECTION 5. <u>Choice of Law</u>. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of New York.

(Remainder of the page intentionally left blank)

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

NINE ENERGY SERVICE, INC.

By:

Name: Guy Sirkes

Title: Senior Vice President and Chief

Financial Officer

NINE DOWNHOLE TECHNOLOGIES, LLC

By:

Name: Guy Sirkes

Title: Senior Vice President and Chief

Financial Officer

[Signature Page to Patent Security Agreement]

PATENT

REEL: 062546 FRAME: 0081

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

MAGNUM OIL TOOLS INTERNATIONAL, LTD

By:

Name: Guy Sirkes

Title: Senior Vice President and Chief

Financial Officer

JPMORGAN CHASE BANK, N.A., as Administrative Agent

By: Salstta
Name: Stephanie Balette

Title: Authorized Officer

[Signature Page to Patent Security Agreement]

Schedule A

U.S. Patents

Owner	Patent Description	Patent Number	Issue Date	Jurisdiction
NINE	Retrievable downhole	10,400,535	9/3/2019	United States
DOWNHOLE	tool			
TECHNOLOGIES,				
LLC				
NINE	DOWNHOLE	8,113,276	2/14/2012	United States
DOWNHOLE	APPARATUS WITH			
TECHNOLOGIES,	PACKER CUP AND			
LLC	SLIP			
NINE	DOWNHOLE	8,336,635	12/25/2012	United States
DOWNHOLE	APPARATUS WITH			
TECHNOLOGIES,	PACKER CUP AND			
LLC	SLIP	0.004.160	4/14/2015	TI '4 1 C4 4
NINE DOWNHOLE	DOWNHOLE TOOL APPARATUS WITH	9,004,160	4/14/2015	United States
TECHNOLOGIES,	SLIP PLATE AND			
LLC	WEDGE			
NINE	Retrievable Downhole	9,915,114	3/13/2018	United States
DOWNHOLE	Tool	9,913,114	3/13/2016	Office States
TECHNOLOGIES,	1001			
LLC				
NINE	DOWNHOLE	8,893,780	11/25/2014	United States
DOWNHOLE	APPARATUS WITH	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	11,20,201.	omico states
TECHNOLOGIES,	PACKER CUP AND			
LLC	SLIP			
NINE	Cup plug having a large	10,487,615	11/26/2019	United States
DOWNHOLE	flow-through inside			
TECHNOLOGIES,	diameter			
LLC				
NINE	Filament-reinforced	11,015,415	5/25/2021	United States
DOWNHOLE	composite material with			
TECHNOLOGIES,	load-aligned filament			
LLC	windings			
NINE	Compact downhole tool	11,365,600	6/21/2022	United States
DOWNHOLE				
TECHNOLOGIES,				
LLC	Consideration 1	11 271 212	(129,12022	TI-:4- J Ct :
NINE	Cup plug having a large	11,371,312	6/28/2022	United States
DOWNHOLE TECHNOLOGIES	flow-through inside diameter			
TECHNOLOGIES,	urameter			
NINE	Sleeve for downhole	11,459,839	10/4/2022	United States
DOWNHOLE	tools	11,437,037	10/4/2022	Office States
TECHNOLOGIES,	10018			
LLC				
LLC			<u> </u>	

NINE	Plugging device	11,149,522	10/19/2021	United States
DOWNHOLE	Trugging device	11,147,522	10/17/2021	Office States
TECHNOLOGIES,				
LLC				
NINE	LOWER SET INSERT	D703,698	4/29/2014	United States
DOWNHOLE	WITH LOWER BALL	D703,070	7/2//2014	Office States
TECHNOLOGIES,	SEAT FOR A			
LLC	DOWNHOLE PLUG			
NINE	DOWNHOLE	8,033,333	12/984,514	United States
DOWNHOLE	PERFORATION	0,033,333	12/707,517	Office States
TECHNOLOGIES,	TOOL			
LLC	TOOL			
NINE	BOTTOM SET	8,079,413	12/20/2011	United States
DOWNHOLE	DOWNHOLE PLUG	0,079,413	12/20/2011	Office States
TECHNOLOGIES,	BOWNHOLL I LUG			
LLC				
NINE	CONFIGURABLE	8,307,892	11/13/2012	United States
DOWNHOLE	INSERTS FOR	0,301,032	11/13/2012	Omicu States
TECHNOLOGIES,	DOWNHOLE PLUGS			
LLC	DOWNHOLE FLOGS			
NINE	DECOMPOSABLE	8,899,317	12/2/2014	United States
DOWNHOLE	PUMPDOWN BALL	0,099,317	12/2/2014	Officed States
TECHNOLOGIES,	FOR DOWNHOLE			
LLC	PLUGS			
NINE	HYDRAULICALY	9,194,209	11/24/2015	United States
DOWNHOLE	FRACTURABLE	9,194,209	11/24/2013	Officed States
	DOWNHOLE VALVE			
TECHNOLOGIES,	ASSEMBLY AND			
LLC	METHOD FOR			
	USING SAME			
NINE	HIGH-MOLECULAR-	9,217,319	12/22/2015	United States
DOWNHOLE	WEIGHT	9,217,319	12/22/2013	Officed States
TECHNOLOGIES,	POLYGLYCOLIDES			
LLC	FOR			
LLC	HYDROCARBON			
	RECOVERY			
NINE	ISOLATION TOOL	9,291,031	3/22/2016	United States
DOWNHOLE	ISOLATION TOOL	9,291,031	312212010	Omicu States
TECHNOLOGIES,				
LLC				
NINE	BOTTOM SET	9,309,744	4/12/2016	United States
DOWNHOLE	DOWNHOLE PLUG	7,303,777	7/12/2010	Omicu States
TECHNOLOGIES,	DO WINIOLL I LOO			
LLC				
NINE	SETTABLE WELL	9,388,662	7/12/2016	United States
DOWNHOLE	TOOL AND METHOD	7,500,002	1/12/2010	Omicu States
TECHNOLOGIES,				
LLC				
NINE	DOWN HOLE TOOL	9,441,448	9/13/2016	United States
DOWNHOLE	HAVING IMPROVED	2, 11 1, 11 0	7/13/2010	Omicu States
DOWNITOLE	III VIII O IVII KO VED			

TECHNIOL OCIEC	CECATENITED DACK	<u> </u>	<u> </u>	
TECHNOLOGIES,	SEGMENTED BACK			
LLC	UP RING			
NINE	DOWNHOLE TOOLS	9,500,061	11/22/2016	United States
DOWNHOLE	HAVING NON-			
TECHNOLOGIES,	TOXIC			
LLC	DEGRADABLE			
	ELEMENTS AND			
	METHODS OF USING			
	THE SAME			
NINE	DOWNHOLE TOOLS	9,506,309	11/29/2016	United States
DOWNHOLE	HAVING NON-	7,500,507	11/2//2010	Cinted States
TECHNOLOGIES,	TOXIC			
LLC	DEGRADABLE			
LLC				
NINE	ELEMENTS E TOOL S	0.507.475	0/7/0017	TT 's 1 Cr s
NINE	DOWNHOLE TOOLS	9,587,475	3/7/2017	United States
DOWNHOLE	HAVING NON-			
TECHNOLOGIES,	TOXIC			
LLC	DEGRADABLE AND			
	THEIR METHODS OF			
	USE			
NINE	CONFIGURABLE	D657,807	4/17/2012	United States
DOWNHOLE	INSERT FOR A	·		
TECHNOLOGIES,	DOWNHOLE TOOL			
LLC				
NINE	CONFIGURABLE	D672,794	12/18/2012	United States
DOWNHOLE	BRIDGE PLUG	0072,774	12/10/2012	Office States
TECHNOLOGIES,	INSERT FOR A			
-				
LLC	DOWNHOLE TOOL	D.(70.100	12/25/2012	TT 's 1 Cr s
NINE	LONG RANGE	D673,182	12/25/2012	United States
DOWNHOLE	COMPOSITE			
TECHNOLOGIES,	DOWNHOLE PLUG			
LLC				
NINE	COMPACT	D673,183	12/25/2012	United States
DOWNHOLE	COMPOSITE			
TECHNOLOGIES,	DOWNHOLE PLUG			
LLC				
NINE	CONFIGURABLE	D684,612	6/18/2013	United States
DOWNHOLE	CAGED BALL	,		
TECHNOLOGIES,	INSERT FOR A			
LLC	DOWNHOLE TOOL			
NINE	CONFIGURABLE	D694,280	11/26/2013	United States
DOWNHOLE	INSERT FOR A	D077,200	11/20/2013	Office States
	DOWNHOLE PLUG			
TECHNOLOGIES,				
LLC	LOWED GET BIGERS	D(04.201	11/06/0012	TT 's 1 Co
NINE	LOWER SET INSERT	D694,281	11/26/2013	United States
DOWNHOLE	WITH A LOWER			
TECHNOLOGIES,	BALL SEAT FOR A			
LLC	DOWNHOLE PLUG			
NINE	LOWER SET INSERT	D694,282	11/26/2013	United States
DOWNHOLE	FOR A DOWNHOLE			
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TECHNIOI OCHEC	DI LIG EOD LIGE DI A	1	1	
TECHNOLOGIES,	PLUG FOR USE IN A			
LLC	WELLBORE	7.607.000	1.5011	
NINE	LOWER SET INSERT	D697,088	1/7/2014	United States
DOWNHOLE	FOR A DOWNHOLE			
TECHNOLOGIES,	PLUG FOR USE IN A			
LLC	WELLBORE			
NINE	LOWER SET CAGED	D698,370	1/28/2014	United States
DOWNHOLE	BALL INSERT FOR A			
TECHNOLOGIES,	DOWNHOLE PLUG			
LLC				
NINE	CONFIGURABLE	D703,713	4/29/2014	United States
DOWNHOLE	CAGED BALL			
TECHNOLOGIES,	INSERT FOR A			
LLC	DOWNHOLE TOOL			
NINE	CONFIGURABLE	D705,821	5/27/2014	United States
DOWNHOLE	INSERT FOR A			
TECHNOLOGIES,	DOWNHOLE PLUG			
LLC				
NINE	CONFIGURABLE	9,109,428	8/18/2015	United States
DOWNHOLE	BRIDGE PLUGS AND	,,10,,.20	0,10,2010	
TECHNOLOGIES,	METHODS FOR			
LLC	USING SAME			
NINE	DECOMPOSABLE	9,127,527	9/8/2015	United States
DOWNHOLE	IMPEDIMENTS FOR	7,127,327	7/0/2013	Office States
TECHNOLOGIES,	DOWNHOLE TOOLS			
LLC	AND METHODS FOR			
LLC	USING SAME			
NINE	CONFIGURABLE	9,163,477	13/488,890	United States
DOWNHOLE	DOWNHOLE TOOLS	9,105,477	13/400,090	Office States
TECHNOLOGIES,	AND METHODS FOR			
LLC	USING SAME	0.101.772	11/10/2015	TT 's 1 Cs s
NINE	DECOMPOSABLE	9,181,772	11/10/2015	United States
DOWNHOLE	IMPEDIMENTS FOR			
TECHNOLOGIES,	DOWNHOLE PLUGS			
LLC	DIGGOLIVADIS	10.227.250	7/2/2010	TT 1. 1.0.
NINE	DISSOLVABLE	10,337,279	7/2/2019	United States
DOWNHOLE	DOWNHOLE TOOLS			
TECHNOLOGIES,	COMPRISING BOTH			
LLC	DEGRADABLE			
	POLYMER ACID			
	AND DEGRADABLE			
	METAL ALLOY			
	ELEMENTS			
NINE	DOWNHOLE PLUG	10,352,125	7/16/2019	United States
DOWNHOLE	HAVING			
TECHNOLOGIES,	DISSOLVABLE			
LLC	METALLIC AND			
	DISSOLVABLE ACID			
	POLYMER			
	ELEMENTS			
		1		

NINE DOWNHOLE TECHNOLOGIES, LLC	ELECTRICALLY POWERED SETTING TOOL AND PERFORATING GUN	10,465,462	11/5/2019	United States
NINE DOWNHOLE TECHNOLOGIES, LLC	DOWNHOLE TOOLS HAVING NON- TOXIC DEGRADABLE ELEMENTS	10,465,468	11/5/2019	United States
NINE DOWNHOLE TECHNOLOGIES, LLC	PLUG OF EXTENDED REACH	10,385,649	8/20/2019	United States
NINE ENERGY SERVICE, INC.	DOWNHOLE ASSEMBLY FOR SELECTIVELY SEALING OFF A WELLBORE	11,098,556	8/24/2021	United States
NINE DOWNHOLE TECHNOLOGIES, LLC	INTERVENTIONLESS FRANGIBLE DISK ISOLATION TOOL	10,107,070	10/23/2018	United States
NINE DOWNHOLE TECHNOLOGIES, LLC	INTERVENTIONLESS FRANGIBLE DISK ISOLATION TOOL	10,887,153	1/5/2021	United States
NINE ENERGY SERVICE, INC.	DOWNHOLE ASSEMBLY FOR SELECTIVELY SEALING OFF A WELLBORE	10,458,201	10/29/2019	United States
NINE DOWNHOLE TECHNOLOGIES, LLC	EXTENDED REACH PLUG	9,850,736	12/26/2017	United States
NINE DOWNHOLE TECHNOLOGIES, LLC	DOWNHOLE VALVE ASSEMBLY	9,739,114	8/22/2017	United States
NINE DOWNHOLE TECHNOLOGIES, LLC	BOTTOM SET DOWNHOLE PLUG	9,850,738	9,850,738	United States
NINE DOWNHOLE TECHNOLOGIES, LLC	Downhole perforation tool and method of subsurface fracturing	7,861,785	1/4/2011	United States
NINE DOWNHOLE	CONFIGURABLE INSERTS FOR DOWNHOLE PLUGS	9,062,522	6/23/2015	United States

TECHNOLOGIES,				
LLC				
NINE	Hydrostatic Setting	9,121,240	9/1/2015	United States
DOWNHOLE	Tool			
TECHNOLOGIES,				
LLC				
NINE	Settable well tool	10,260,308	4/16/2019	United States
DOWNHOLE	method			
TECHNOLOGIES,				
LLC				
NINE	SPLIT RING	10,662,732	5/26/2020	United States
DOWNHOLE	SEALING			
TECHNOLOGIES,	ASSEMBLIES			
LLC				
NINE ENERGY	DOWNHOLE	10,871,053	12/22/2020	United States
SERVICE, INC.	ASSEMBLY FOR			
	SELECTIVELY			
	SEALING OFF A			
	WELLBORE			

Canadian Patents

Applicant	Owner	Patent	Appl./Reg. No.
FRAZIER, W.	MAGNUM OIL	ISOLATION TOOL WITH	2711323
LYNN	TOOLS	RUPTURABLE DISC	
	INTERNATIONAL,		
	LTD		
FRAZIER, W.	MAGNUM OIL	BREAKING OF FRANGIBLE	2856927
LYNN	TOOLS	ISOLATION ELEMENTS	
	INTERNATIONAL,		
	LTD		
MAGNUM OIL	NINE DOWNHOLE	DOWNHOLE PLUG HAVING	2935508
TOOLS	TECHNOLOGIES,	DISSOLVABLE METALLIC AND	
INTERNATIONAL,	LLC	DISSOLVABLE ACID POLYMER	
LTD.		ELEMENTS	
MAGNUM OIL	NINE DOWNHOLE	INTERVENTIONLESS FRANGIBLE	2937076
TOOLS	TECHNOLOGIES,	DISK ISOLATION TOOL	
INTERNATIONAL,	LLC		
LLC			
MAGNUM OIL	MAGNUM OIL	DOWNHOLE TOOL WITH	3040142
TOOLS	TOOLS	PROTECTIVE COVERING	
INTERNATIONAL,	INTERNATIONAL,		
LTD.	LTD.		
MAGNUM OIL	NINE DOWNHOLE	GAS CAPABLE FRANGIBLE DISC	3089387
TOOLS	TECHNOLOGIES,	BARRIER VALVE	
INTERNATIONAL,	LLC		
LTD.			

Applicant	Owner	Patent	Appl./Reg. No.
GREENLEE,	NINE DOWNHOLE	RETRIEVABLE DOWNHOLE TOOL	2924287
DONALD R	TECHNOLOGIES,		
	LLC		
GREENLEE,	NINE DOWNHOLE	DOWNHOLE APPARATUS WITH	2678819
DONALD R	· /	PACKER CUP AND SLIP	
	LLC		
GREENLEE,			
DONALD J			
GREENLEE,		DOWNHOLE APPARATUS WITH	2787542
DONALD R	TECHNOLOGIES,	PACKER CUP AND SLIP	
CDEENI EE	LLC		
GREENLEE,			
DONALD J	MINE DOWNIEGE	DOWNHOLE TOOL ADDAD AT LC	2026205
GREENLEE, DONALD R		DOWNHOLE TOOL APPARATUS WITH SLIP PLATE AND WEDGE	2836295
DONALD K	TECHNOLOGIES, LLC	WITH SLIP PLATE AND WEDGE	
GREENLEE,			
DONALD J			
	NINE DOWNHOLE	FILAMENT REINFORCED	3039385
		COMPOSITE MATERIAL WITH	3037303
1	LLC	LOAD-ALIGNED FILAMENT	
		WINDINGS	
NINE DOWNHOLE	NINE DOWNHOLE	COMPACT DOWNHOLE TOOL	3083608
TECHNOLOGIES,			
1	LLC		
NINE DOWNHOLE	NINE DOWNHOLE	DROP BALLS FOR USE WITH	3095016
TECHNOLOGIES,	TECHNOLOGIES,	SETTABLE DOWNHOLE TOOLS	
LLC	LLC		
NINE DOWNHOLE	NINE DOWNHOLE	PLUGGING DEVICE	3108164
TECHNOLOGIES,	TECHNOLOGIES,		
LLC	LLC		
1		SLEEVE FOR DOWNHOLE TOOLS	3108205
TECHNOLOGIES,	1 '		
	LLC		
			3146640
TECHNOLOGIES,	· '	PLUGGING AN OIL WELL	
	LLC		
NINE DOWNHOLE		SHEARABLE SLEEVE	3115953
TECHNOLOGIES,	· ·		
	LLC		
		MULTI-CYCLE COUNTER SYSTEM	3158151
TECHNOLOGIES,			
	LLC	WELL BODE BLUG WAYNE	2662422
FRAZIER, W.	NINE DOWNHOLE	WELLBORE PLUG HAVING	2663423
LYNN	TECHNOLOGIES,	SHEARABLE THREADS	
	LLC		

U.S. Patent Applications

Name of Grantor	Patent Application	Application Filing Date	Application Serial Number	Jurisdiction
NINE	Shearable Sleeve	4/16/2021	17/233,215	United States
DOWNHOLE		., 10, 2021	111200,210	
TECHNOLOGIES,				
LLC				
NINE	Systems and	1/25/2022	17/648,912	United States
DOWNHOLE	Methods for			
TECHNOLOGIES,	Plugging an Oil			
LLC	Well			
NINE	Multi-Cycle	11/10/2022	17/662,816	United States
DOWNHOLE	Counter System			
TECHNOLOGIES,				
LLC				
NINE	COMPACT	6/21/2022	17/808,051	United States
DOWNHOLE	DOWNHOLE			
TECHNOLOGIES,	TOOL			
LLC				
NINE	DOWNHOLE	8/24/2021	17/410,763	United States
DOWNHOLE	ASSEMBLY			
TECHNOLOGIES,	FOR			
LLC	SELECTIVELY			
	SEALING OFF A			
2.772.777	WELLBORE	1/20/2010	16/250 010	77.1.10
NINE	GAS CAPABLE	1/28/2019	16/259,910	United States
DOWNHOLE	FRANGIBLE			
TECHNOLOGIES,	DISC BARRIER			
		(127/2022	17/900 252	Tinital
		0/2//2022	17/809,232	United
1				
-				
		10/18/2021	17/504 204	United States
	r rugging Device	10/10/2021	111304,434	United States
· ·				
LLC NINE DOWNHOLE TECHNOLOGIES, LLC NINE DOWNHOLE TECHNOLOGIES, LLC	VALVE Cup Plug Having a Large Flow- Through Inside Diameter Plugging Device	6/27/2022	17/809,252 17/504,294	United United States

PATENT REEL: 062546 FRAME: 0091

RECORDED: 01/30/2023