

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7210367

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
TYPHON TECHNOLOGY SOLUTIONS (U.S.), LLC	03/04/2022

RECEIVING PARTY DATA

Name:	GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT
Street Address:	200 WEST STREET
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10282

PROPERTY NUMBERS Total: 53

Property Type	Number
Patent Number:	9103193
Patent Number:	9121257
Patent Number:	9140110
Patent Number:	9366114
Patent Number:	9475020
Patent Number:	9475021
Patent Number:	9534473
Patent Number:	9562420
Patent Number:	10076733
Patent Number:	10107084
Patent Number:	10107085
Patent Number:	10221668
Patent Number:	10227855
Patent Number:	10374485
Patent Number:	10378326
Patent Number:	10415332
Patent Number:	10502042
Patent Number:	10519730
Patent Number:	10518229
Patent Number:	10648312

PATENT

Property Type	Number
Patent Number:	10689961
Patent Number:	10718194
Patent Number:	10718195
Patent Number:	10724353
Patent Number:	10774630
Patent Number:	10837270
Patent Number:	10851634
Patent Number:	10876386
Patent Number:	10895138
Patent Number:	10962305
Patent Number:	10982521
Patent Number:	11002125
Patent Number:	11070109
Patent Number:	11073242
Patent Number:	11118438
Patent Number:	11168554
Patent Number:	11187069
Application Number:	16521460
Application Number:	16525373
Application Number:	16691277
Application Number:	16717732
Application Number:	16933488
Application Number:	16933939
Application Number:	16938759
Application Number:	17028785
Application Number:	17212968
Application Number:	17379722
Application Number:	17379715
Application Number:	17396125
Application Number:	17500525
Application Number:	17518285
Application Number:	17518309
Application Number:	17528978

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 033910/1173

NAME OF SUBMITTER: J. JASON MULL

SIGNATURE: /J. Jason Mull/

DATE SIGNED: 03/07/2022

Total Attachments: 8

source=EWS - Short Form Patents Security Agreement [Executed](45844617.1)#page1.tif
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EXECUTION VERSION

SHORT-FORM PATENTS SECURITY AGREEMENT

WHEREAS, TYPHON TECHNOLOGY SOLUTIONS (U.S.), LLC (the “Grantor”) has applied for letters patent and has been granted letters patents in the United States Patent and Trademark Office, and is the owner of the patent applications and patents listed in the attached Schedule of Patents and Patent Applications associated therewith;

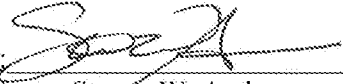
WHEREAS, the Grantor has contemporaneously with the execution of this Short-Form Patents Security Agreement entered into the Pledge and Security Agreement dated as of March 4, 2022, (as modified from time to time, the “Security Agreement”), in which the Grantor has granted certain interests in favor of GOLDMAN SACHS BANK USA, as Collateral Agent (the “Collateral Agent”) for the benefit of the Secured Parties (as defined therein); and

WHEREAS, pursuant to the Security Agreement, the Grantor has agreed with the Collateral Agent and the Secured Parties to execute this Short-Form Patents Security Agreement;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Grantor hereby grants to the Collateral Agent for the benefit of the Secured Parties, to the extent provided in the Security Agreement (the terms and conditions of which are hereby incorporated herein), a security interest in all of its right, title and interest in, to and under all the patents and patent applications whether now owned or at any time hereafter acquired, of the Grantor issued by, or for which applications have been filed with, the United States Patent and Trademark Office, including the patents and applications on the attached Schedule of Patents and Patent Applications, and all related patents and applications thereto, including all reissues, continuations, continuations-in-part, revisions, extensions, re-examinations thereof, any patents and patent applications claiming priority to said patents and patent applications or from which said patents and patent applications claim priority, and pending applications associated therewith, as collateral security for the prompt and complete payment and performance when due of all the Secured Obligations (as defined in the Security Agreement). Notwithstanding the foregoing, in the event of any conflict between this Short-Form Patents Security Agreement and the Security Agreement, the Security Agreement shall control.

Date: March 4, 2022

Typhon Technology Solutions (U.S.), LLC

By: 
Name: Steven W. Anderson
Title: President and CEO

SIGNATURE PAGE TO PATENTS SECURITY AGREEMENT

PATENT
REEL: 059334 FRAME: 0343

SCHEDULE OF
PATENTS AND PATENT A

<u>No.</u>	<u>Patent Title</u>	<u>Filed Date</u>	<u>Application Number</u>	<u>Grant Date</u>	<u>Patent No.</u>
1.	MOBILE, MODULAR, ELECTRICALLY POWERED SYSTEM FOR USE IN FRACTURING UNDERGROUND FORMATIONS	11/14/2014	14/542,000	8/11/2015	9,103,193
2.	MOBILE, MODULAR, ELECTRICALLY POWERED SYSTEM FOR USE IN FRACTURING UNDERGROUND FORMATIONS	11/14/2014	14/541,993	9/1/2015	9,121,257
3.	MOBILE, MODULAR, ELECTRICALLY POWERED SYSTEM FOR USE IN FRACTURING UNDERGROUND FORMATIONS USING LIQUID PETROLEUM GAS	3/14/2013	13/804,906	9/22/2015	9,140,110
4.	MOBILE, MODULAR, ELECTRICALLY POWERED SYSTEM FOR USE IN FRACTURING UNDERGROUND FORMATIONS	4/6/2012	13/441,334	6/14/2016	9,366,114
5.	MOBILE, MODULAR, ELECTRICALLY POWERED SYSTEM FOR USE IN FRACTURING UNDERGROUND FORMATIONS USING LIQUID PETROLEUM GAS	7/6/2015	14/792,193	10/25/2016	9,475,020
6.	MOBILE, MODULAR, ELECTRICALLY POWERED SYSTEM FOR USE IN FRACTURING UNDERGROUND FORMATIONS USING LIQUID PETROLEUM GAS	7/6/2015	14/792,206	10/25/2016	9,475,021
7.	Mobile Electric Power Generation and Electrically Powered Hydraulic	12/16/2015	14/971,450	1/3/2017	9,534,473

<u>No.</u>	<u>Patent Title</u>	<u>Filed Date</u>	<u>Application Number</u>	<u>Grant Date</u>	<u>Patent No.</u>
	Fracturing of Underground Formations				
8.	Mobile Electric Power Generation and Electrically Powered Hydraulic Fracturing of Underground Formations	12/16/2015	14/971,555	2/7/2017	9,562,420
9.	Utilizing Wet Fracturing Sand For Hydraulic Fracturing Operations	3/7/2017	15/452,415	9/18/2018	10,076,733
10.	SYSTEM AND METHOD FOR DEDICATED ELECTRIC SOURCE FOR USE IN FRACTURING UNDERGROUND FORMATIONS USING LIQUID PETROLEUM GAS	10/24/2016	15/332,709	10/23/2018	10,107,084
11.	ELECTRIC BLENDER SYSTEM, APPARATUS AND METHOD FOR USE IN FRACTURING UNDERGROUND FORMATIONS USING LIQUID PETROLEUM GAS	10/24/2016	15/332,765	10/23/2018	10,107,085
12.	MOBILE, MODULAR, ELECTRICALLY POWERED SYSTEM FOR USE IN FRACTURING UNDERGROUND FORMATIONS	3/31/2016	15/086,829	3/5/2019	10,221,668
13.	MOBILE, MODULAR, ELECTRICALLY POWERED SYSTEM FOR USE IN FRACTURING UNDERGROUND FORMATIONS	3/31/2016	15/086,806	3/12/2019	10,227,855
14.	MOBILE ELECTRIC POWER GENERATION FOR HYDRAULIC FRACTURING OF SUBSURFACE GEOLOGICAL FORMATIONS	12/20/2016	15/385,582	8/6/2019	10,374,485
15.	REMOTE DISENGAGEMENT FOR	08/31/2016	15/253,686	8/13/2019	10,378,326

<u>No.</u>	<u>Patent Title</u>	<u>Filed Date</u>	<u>Application Number</u>	<u>Grant Date</u>	<u>Patent No.</u>
	DUAL SHAFT MOTOR FRACTURING TRAILER				
16	HYDRATION-BLENDER TRANSPORT FOR FRACTURING OPERATION	06/28/2018	16/021,649	09/17/2019	10,415,332
17.	ELECTRIC BLENDER SYSTEM, APPARATUS AND METHOD FOR USE IN FRACTURING UNDERGROUND FORMATIONS USING LIQUID PETROLEUM GAS	10/22/2018	16/167,474	12/10/2019	10,502,042
18.	ELECTRIC POWER DISTRIBUTION FOR FRACTURING OPERATION	06/28/2018	16/021,691	12/31/2019	10,519,730
19.	Utilizing Wet Fracturing Sand For Hydraulic Fracturing Operations	8/7/2018	16/056,820	12/31/2019	10,518,229
20.	DUAL PUMP TRAILER MOUNTED ELECTRIC FRACTURING SYSTEM	5/27/2019	16/423,090	5/12/2020	10,648,312
21.	MULTIPLE GENERATOR MOBILE ELECTRIC POWERED FRACTURING SYSTEM	5/27/2019	16/423,088	6/23/2020	10,689,961
22.	CONTROL SYSTEM FOR ELECTRIC FRACTURING OPERATIONS	5/27/2019	16/423,084	7/21/2020	10,718,194
23.	DUAL PUMP VFD CONTROLLED MOTOR ELECTRIC FRACTURING SYSTEM	5/27/2019	16/423,091	7/21/2020	10,718,195
24.	DUAL PUMP VFD CONTROLLED SYSTEM FOR ELECTRIC FRACTURING OPERATIONS	8/23/2018	16/110,861	7/28/2020	10,724,353
25.	CONTROL SYSTEM FOR ELECTRIC FRACTURING OPERATIONS	8/23/2018	16/110,802	9/15/2020	10,774,630
26.	VFD CONTROLLED MOTOR MOBILE ELECTRICALLY POWERED SYSTEM FOR USE IN FRACTURING	5/22/2019	16/419,553	11/17/2020	10,837,270

<u>No.</u>	<u>Patent Title</u>	<u>Filed Date</u>	<u>Application Number</u>	<u>Grant Date</u>	<u>Patent No.</u>
	UNDERGROUND FORMATIONS FOR ELECTRIC FRACTURING OPERATIONS				
27.	DUAL PUMP MOBILE ELECTRICALLY POWERED SYSTEM FOR USE IN FRACTURING UNDERGROUND FORMATIONS	4/13/2018	15/953,396	12/1/2020	10,851,634
28.	DUAL PUMP TRAILER MOUNTED ELECTRIC FRACTURING SYSTEM	8/23/2018	16/110,822	12/29/2020	10,876,386
29.	MULTIPLE GENERATOR MOBILE ELECTRIC POWERED FRACTURING SYSTEM	8/23/2018	16/110,794	1/19/2021	10,895,138
30.	EXHAUST HEAT RECOVERY FROM A MOBILE POWER GENERATION SYSTEM	12/31/2018	16/236,734	03/30/2021	10,962,305
31.	DUAL PUMP VFD CONTROLLED MOTOR ELECTRIC FRACTURING SYSTEM	8/23/2018	16/110,841	4/20/2021	10,982,521
32.	CONTROL SYSTEM FOR ELECTRIC FRACTURING OPERATIONS	7/20/2020	16/933,627	5/11/2021	11,002,125
33.	MOBILE ELECTRIC POWER GENERATION FOR HYDRAULIC FRACTURING OF SUBSURFACE GEOLOGICAL FORMATIONS	8/5/2019	16/531,913	7/20/2021	11,070,109
34.	CONDITIONING, COMPRESSING AND STORING HYDROCARBON GAS FOR MOBILE, ELECTRIC POWER GENERATION	5/16/2019	16/414,216	7/27/2021	11,073,242
35.	TURBINE DRIVEN ELECTRIC FRACTURING SYSTEM AND METHOD	11/13/2020	17/097,650	9/14/2021	11,118,438
36.	REMOTE DISENGAGEMENT FOR DUAL SHAFT MOTOR FRACTURING TRAILER	3/6/2019	16/294,786	11/9/2021	11,168,554

<u>No.</u>	<u>Patent Title</u>	<u>Filed Date</u>	<u>Application Number</u>	<u>Grant Date</u>	<u>Patent No.</u>
37.	MULTIPLE GENERATOR MOBILE ELECTRONIC POWERED FRACTURING SYSTEM	6/23/2020	16/910,024	11/30/2021	11,187,069

Patent Applications:

<u>No.</u>	<u>Grantor</u>	<u>Patent Application Title</u>	<u>Filed Date</u>	<u>Application Number</u>
1.	Typhon Technology Solutions (U.S.), LLC	Switch Gear Transport that Distributes Electric Power for Fracturing Operations	7/24/2019	16/521,460
2.	Typhon Technology Solutions (U.S.), LLC	ENGAGEMENT AND DISENGAGEMENT WITH EXTERNAL GEAR BOX STYLE PUMPS	7/29/2019	16/525,373
3.	Typhon Technology Solutions (U.S.), LLC	ELECTRIC POWER DISTRIBUTION FOR FRACTURING OPERATION	11/21/2019	16/691,277
4.	Typhon Technology Solutions (U.S.), LLC	PRIME MOVER AND LUBE OIL COOLING ASSEMBLY FOR A FRACTURING PUMP TRANSPORT	12/17/2019	16/717,732
5.	Typhon Technology Solutions (U.S.), LLC	MOBILE, MODULAR, ELECTRICALLY POWERED SYSTEM FOR USE IN FRACTURING UNDERGROUND FORMATIONS USING LIQUID PETROLEUM GAS	7/20/2020	16/933,488
6.	Typhon Technology Solutions (U.S.), LLC	DUAL PUMP VFD CONTROLLED MOTOR ELECTRIC FRACTURING SYSTEM	7/20/2020	16/933,939
7.	Typhon Technology Solutions (U.S.), LLC	Artificial Intelligence Based Hydraulic Fracturing System Monitoring and Control	7/24/2020	16/938,759
8.	Typhon Technology Solutions (U.S.), LLC	Chilled Intake Air for Increased Power Generation	9/22/2020	17/028,785
9.	Typhon Technology Solutions (U.S.), LLC	EXHAUST HEAT RECOVERY FROM A MOBILE POWER GENERATION SYSTEM	3/25/2021	17/212,968
10.	Typhon Technology Solutions (U.S.), LLC	MOBILE ELECTRIC POWER GENERATION FOR HYDRAULIC FRACTURING OF SUBSURFACE GEOLOGICAL FORMATIONS	7/19/2021	17/379,722
11.	Typhon Technology Solutions (U.S.), LLC	MOBILE ELECTRIC POWER GENERATION FOR HYDRAULIC FRACTURING OF SUBSURFACE GEOLOGICAL FORMATIONS	7/19/2021	17/379,715

12.	Typhon Technology Solutions (U.S.), LLC	DUAL PUMP VFD CONTROLLED MOTOR ELECTRIC FRACTURING SYSTEM	8/6/2021	17/396,125
13.	Typhon Technology Solutions (U.S.), LLC	Mobile Fracturing Pump Transport For Hydraulic Fracturing of Subsurface Geological Formations	10/13/2021	17/500,525
14.	Typhon Technology Solutions (U.S.), LLC	MOBILE MODULAR, ELECTRICALLY POWERED SYSTEM FOR USE IN FRACTURING UNDERGROUND FORMATIONS USING LIQUID PETROLEUM GAS	11/3/2021	17/518,285
15.	Typhon Technology Solutions (U.S.), LLC	MULTIPLE GENERATOR MOBILE ELECTRONIC POWERED FRACTURING SYSTEM	11/3/2021	17/518,309
16.	Typhon Technology Solutions (U.S.), LLC	Utilizing Wet Fracturing Sand For Hydraulic Fracturing Operations	11/17/2021	17/528,978