

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6795591

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
MULTI-CHEM GROUP, LLC	05/04/2021
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: 1	
Property Type	Number
Application Number:	17352926
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
Phone:	2819624503
Email:	dmasters@ctumeylawgroup.com
Correspondent Name:	COREY TUMEY
Address Line 1:	P.O. BOX 890226
Address Line 4:	HOUSTON, TEXAS 77062
ATTORNEY DOCKET NUMBER:	1560-055808
NAME OF SUBMITTER:	DANIEL L. MASTERS
SIGNATURE:	/dlm/
DATE SIGNED:	07/02/2021
Total Attachments: 5	
source=05-04-2021-Multi-Chem-to-HESI-Master Assignment-Patent-US-and-PCT#page1.tif	
source=05-04-2021-Multi-Chem-to-HESI-Master Assignment-Patent-US-and-PCT#page2.tif	
source=05-04-2021-Multi-Chem-to-HESI-Master Assignment-Patent-US-and-PCT#page3.tif	
source=05-04-2021-Multi-Chem-to-HESI-Master Assignment-Patent-US-and-PCT#page4.tif	
source=05-04-2021-Multi-Chem-to-HESI-Master Assignment-Patent-US-and-PCT#page5.tif	

INTELLECTUAL PROPERTY ASSIGNMENT

This **INTELLECTUAL PROPERTY ASSIGNMENT** (the "**Assignment**") is entered into as of the 4th day of May, 2021, by and between Multi-Chem Group, LLC ("**Assignor**") and Halliburton Energy Services, Inc. ("**Assignee**").

RECITALS

WHEREAS, Assignor and Assignee are wholly owned subsidiaries of Halliburton Company (the "**Company**"); and

WHEREAS, the Company is realigning some of the assets of its subsidiaries to consolidate intellectual property rights into entities that are already licensed to use such intellectual property rights, namely, the patents listed in Exhibits A-1 through A-25 (the "**Patents**") and the trademarks listed in Exhibits B-1 through B-18 (the "**Trademarks**");

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby expressly acknowledged, the parties hereto agree as follows:

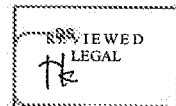
1. **Patent Assignment.** Assignor hereby assigns, transfers and conveys unto Assignee the full and exclusive right, title and interest in the Patents, and its territorial possessions and for any and all foreign countries, in and to said invention, in and to any and all improvements, and any divisional, continuing or reissue application based on the present Patents.

2. **Trademark Assignment.** Assignor hereby assigns, transfers and conveys to Assignee all of its right, title and interest in and to the Trademarks, in the United States and elsewhere, including the right to sue for past infringement, together with the goodwill of the business symbolized by the Trademarks and the portion of business to which the Trademarks pertain, and all common law rights and all registrations and pending and abandoned applications for the Trademarks.

3. **Further Assurances.** The parties agree to take such further actions and execute and deliver such other documents, assignments, certificates, agreements, and other instruments as may be necessary or desirable in order to consummate or implement this Assignment.

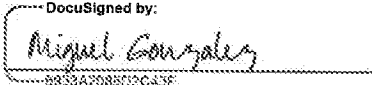
4. **Binding Effect.** This Assignment, and all the terms and provisions hereof, shall be binding upon and shall inure to the benefit of Assignor and Assignee, and their respective successors and assigns.

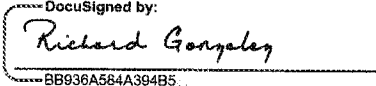
IN WITNESS WHEREOF, the parties have executed this Assignment as of the date first written above.



ASSIGNOR:
Multi-Chem Group, LLC

ASSIGNEE:
Halliburton Energy Services, Inc.

By:  DocuSigned by:
Miguel Gonzalez

By:  DocuSigned by:
Richard Gonzalez

Name: Miguel Gonzalez
Title: Vice President - Multi-Chem

Name: Richard Gonzalez
Title: Senior Vice President - Completions and Production Division

**Exhibit A-1
Patents**

Patent Reference	Country	Application Number	Filed Date	Patent No.	Grant Date	Status
2017-IPM-101380-U1-PCT	Patent Cooperation Treaty	PCT/US2019/027977	2019-04-17			Application
2018-IPM-102474-U1-PCT	Patent Cooperation Treaty	PCT/US2020/034681	2020-05-27			Application
2019-IPM-103018-U1-PCT	Patent Cooperation Treaty	PCT/US2020/028244	2020-04-15			Application
2019-IPM-103075-U1-PCT	Patent Cooperation Treaty	PCT/US2019/055348	2019-10-09			Application
2019-IPM-103676-U1-PCT	Patent Cooperation Treaty	PCT/US2020/034613	2020-05-27			Application
2019-IPM-103681-U1-PCT	Patent Cooperation Treaty	PCT/US2020/058920	2020-11-04			Application
2019-IPM-103823-U1-PCT	Patent Cooperation Treaty	PCT/US2020/025711	2020-03-30			Application
2019-IPM-103873-U1-PCT	Patent Cooperation Treaty	PCT/US2020/038245	2020-04-15			Application
2019-IPM-103891-U1-PCT	Patent Cooperation Treaty	PCT/US2020/031562	2020-05-06			Application
2020-IPM-103953-U1-PCT	Patent Cooperation Treaty	PCT/US2020/034162	2020-05-22			Application
2020-IPM-103982-U1-PCT	Patent Cooperation Treaty	PCT/US2020/037050	2020-06-10			Application
2017-IPM-101875-U1P1-PCT	Patent Cooperation Treaty	PCT/US2019/053893	2019-09-30			Published
2018-IPM-102476-U1-PCT	Patent Cooperation Treaty	PCT/US2019/016096	2019-01-31			Published
2018-IPM-102583-U1-PCT	Patent Cooperation Treaty	PCT/US2019/032809	2019-05-17			Published
2018-IPM-102743-U1-PCT	Patent Cooperation Treaty	PCT/US2019/033656	2019-05-23			Published
2018-IPM-102904-U1-PCT	Patent Cooperation Treaty	PCT/US2020/017858	2020-02-12			Published
2018-IPM-102932-U1-PCT	Patent Cooperation Treaty	PCT/US2019/049537	2019-09-04			Published
2019-IPM-102964-U1-PCT	Patent Cooperation Treaty	PCT/US2019/049389	2019-09-03			Published
2019-IPM-102993-U1-PCT	Patent Cooperation Treaty	PCT/US2019/042667	2019-07-19			Published
2019-IPM-102994-U1-PCT	Patent Cooperation Treaty	PCT/US2019/043363	2019-07-25			Published
2019-IPM-102995-U1-PCT	Patent Cooperation Treaty	PCT/US2019/053789	2019-09-30			Published
2019-IPM-103023-U1-PCT	Patent Cooperation Treaty	PCT/US2019/054614	2019-10-08			Published
2019-IPM-103024-U1-PCT	Patent Cooperation Treaty	PCT/US2019/040232	2019-07-02			Published
2019-IPM-103030-U1-PCT	Patent Cooperation Treaty	PCT/US2019/049387	2019-09-03			Published
2019-IPM-103153-U1-PCT	Patent Cooperation Treaty	PCT/US2020/017025	2020-02-06			Published
2019-IPM-103506-U1-PCT	Patent Cooperation Treaty	PCT/US2020/028072	2020-04-14			Published
2019-IPM-103523-U1-PCT	Patent Cooperation Treaty	PCT/US2020/028076	2020-04-14			Published
2012-IP-055686-U1-US	United States of America	13/245,580	2011-09-21			Application
2014-IP-088778-U1D1-US	United States of America	16/787,690	2014-12-23			Application
2014-IPM-097381-U1-US	United States of America	16/489,900	2017-04-04			Application
2015-IPM-098924-U1-US	United States of America	16/881,857	2020-05-22			Application
2015-IPM-099055-U1P1-US	United States of America	16/628,584	2015-11-16			Application
2017-IPM-101464-U1-US	United States of America	16/322,210	2018-03-13			Application
2018-IPM-102475-U1-US	United States of America	16/499,803	2019-06-04			Application
2018-IPM-102477-U1-US	United States of America	17/270,589	2018-09-25			Application
2018-IPM-102478-US01	United States of America	17/275,929	2018-10-19			Application
2019-IPM-103018-U1-US	United States of America	16/846,705	2020-04-13			Application

Patent Reference	Country	Application Number	Filed Date	Patent No.	Grant Date	Status
2019-IPM-103031-U1-US	United States of America	16/833,106	2020-03-27			Application
2019-IPM-103075-U1-US	United States of America	16/596,065	2019-10-08			Application
2019-IPM-103153-U1-US	United States of America	16/782,570	2020-02-05			Application
2019-IPM-103681-U1-US	United States of America	16/733,084	2020-01-02			Application
2019-IPM-103823-U1-US	United States of America	16/830,530	2020-03-26			Application
2019-IPM-103873-U1-US	United States of America	16/846,734	2020-04-13			Application
2019-IPM-103891-U1-US	United States of America	16/860,851	2020-04-28			Application
2020-IPM-103953-U1-US	United States of America	16/881,175	2020-05-22			Application
2020-IPM-103982-U1-US	United States of America	16/890,112	2020-06-02			Application
2020-IPM-104246-U1-US	United States of America	17/224,538	2021-04-09			Application
2012-IP-055681-U1D1D1-US	United States of America	13/589,171	2017-05-08	10,287,487	2019-05-14	Granted
2012-IP-055681-U1D1-US	United States of America	14/755,186	2015-06-30	9,683,433	2017-05-20	Granted
2012-IP-055681-U1-US	United States of America	13/213,781	2011-08-19	9,096,789	2015-08-04	Granted
2012-IP-055682-U1C1-US	United States of America	13/712,331	2013-12-12	8,771,603	2014-07-08	Granted
2012-IP-055682-U1-US	United States of America	13/132,829	2009-12-07	8,354,087	2013-01-15	Granted
2012-IP-055697-U1-US	United States of America	13/238,757	2011-09-21	9,828,834	2017-11-28	Granted
2012-IP-055708-U1-US	United States of America	13/611,523	2013-09-12	9,422,470	2016-08-23	Granted
2012-IP-057617-U1-US	United States of America	13/845,677	2013-03-18	9,333,901	2017-01-03	Granted
2012-IP-061777-U1-US	United States of America	13/579,502	2010-02-16	9,127,986	2015-09-08	Granted
2013-IP-073042-U1C1-US	United States of America	15/888,213	2018-02-05	13,435,620	2019-10-08	Granted
2013-IP-073042-U1-US	United States of America	14/778,236	2014-04-11	9,920,239	2018-03-20	Granted
2013-IP-074734-U1-US	United States of America	15/302,001	2014-05-16	10,526,873	2020-01-07	Granted
2013-IP-082950-U1D1D1-US	United States of America	16/049,957	2018-07-31	10,364,385	2019-07-30	Granted
2013-IP-082950-U1D1-US	United States of America	15/493,778	2014-05-05	10,059,871	2018-08-28	Granted
2013-IP-082950-U1-US	United States of America	14/891,018	2014-05-05	9,676,991	2017-06-13	Granted
2013-IP-082958-U1-US	United States of America	15/527,769	2014-12-22	10,590,333	2020-03-17	Granted
2013-IP-082962-U1-US	United States of America	14/228,152	2014-03-27	10,241,100	2019-03-26	Granted
2013-IP-083088-U1D1-US	United States of America	15/465,787	2017-03-22	10,246,628	2019-04-02	Granted
2013-IP-083088-U1-US	United States of America	15/025,475	2014-05-05	9,637,679	2017-05-02	Granted
2013-IP-083089-U1D1-US	United States of America	15/706,903	2017-09-18	9,902,893	2018-02-27	Granted
2013-IP-083089-U1-US	United States of America	14/765,460	2014-05-05	9,796,906	2017-10-24	Granted
2014-IP-085757-U1-US	United States of America	14/278,938	2014-05-13	9,114,372	2015-08-25	Granted
2014-IP-087614-U1-US	United States of America	14/895,464	2014-04-04	9,488,586	2016-11-08	Granted
2014-IP-087705-U1-US	United States of America	15/527,070	2014-12-22	10,106,721	2018-10-23	Granted
2014-IP-088412-U1-US	United States of America	15/314,767	2014-07-02	9,969,928	2018-05-15	Granted
2014-IP-088776-U1P1D1-US	United States of America	15/635,634	2017-06-28	9,970,265	2018-05-15	Granted
2014-IP-088776-U1P1-US	United States of America	14/955,292	2015-12-01	9,725,986	2017-08-08	Granted
2014-IP-088776-U1-US	United States of America	15/322,996	2014-08-01	9,382,185	2018-05-29	Granted
2014-IP-088777-U1-US	United States of America	15/100,917	2014-12-23	9,896,616	2018-02-20	Granted
2014-IP-088778-U1-US	United States of America	15/528,186	2014-12-23	10,597,582	2020-03-24	Granted

Patent Reference	Country	Application Number	Filed Date	Patent No.	Grant Date	Status
2014-IP-089531-U1-US	United States of America	15/537,905	2014-12-23	10,435,989	2019-10-08	Granted
2014-IP-091927-U1-US	United States of America	15/527,788	2014-12-22	10,550,309	2020-02-04	Granted
2014-IP-091929-U1-US	United States of America	15/527,147	2014-12-23	10,113,102	2018-10-30	Granted
2014-IP-093327-U1-US	United States of America	15/560,033	2015-04-20	10,584,275	2020-03-10	Granted
2014-IP-093329-U1C1-US	United States of America	15/567,892	2018-02-15	10,668,510	2020-06-02	Granted
2014-IP-093329-U1-US	United States of America	15/038,723	2015-04-20	9,919,348	2018-03-20	Granted
2014-IPM-097763-U1-US	United States of America	15/512,724	2014-11-13	10,767,474	2020-09-08	Granted
2015-IPM-098445-U1-US	United States of America	15/769,038	2015-12-18	10,934,470	2021-03-02	Granted
2015-IPM-099055-U1-US	United States of America	15/765,166	2015-11-16	10,640,698	2020-05-05	Granted
2015-IPM-099301-U1-US	United States of America	15/504,930	2016-04-19	10,011,756	2018-07-03	Granted
2015-IPM-099375-U1D1-US	United States of America	16/122,163	2018-09-05	10,808,163	2020-10-20	Granted
2015-IPM-099375-U1-US	United States of America	15/504,996	2016-04-19	10,100,341	2018-10-16	Granted
2016-IPM-100051-U1-US	United States of America	16/090,410	2016-05-31	10,442,986	2019-10-15	Granted
2017-IPM-101875-U1P1-US	United States of America	16/234,178	2018-12-27	10,968,675	2021-04-27	Granted
2018-IPM-102111-U1-US	United States of America	15/973,194	2018-05-07	10,913,887	2021-02-09	Granted
2018-IPM-102456-U1-US	United States of America	16/368,396	2003-02-21	6,902,662	2005-06-07	Granted
2018-IPM-102459-U1-US	United States of America	16/349,719	2003-01-23	6,853,537	2005-10-11	Granted
2018-IPM-102461-U1-US	United States of America	16/517,430	2014-10-17	9,551,642	2017-01-24	Granted
2018-IPM-102479-U1-US	United States of America	16/512,943	2019-07-16	10,800,984	2021-10-13	Granted
2018-IPM-102904-U1-US	United States of America	16/777,155	2020-01-30	10,961,445	2021-03-30	Granted
2019-IPM-102964-U1-US	United States of America	16/559,357	2019-09-03	10,954,455	2021-03-23	Granted
2019-IPM-103023-U1-US	United States of America	16/591,204	2019-10-02	10,800,684	2020-10-13	Granted
2018-IPM-102476-US01	United States of America		2019-01-31			Instructed
2019-IPM-102995-US01	United States of America		2019-09-30			Instructed
2014-IP-091927-U1D1-US	United States of America	16/735,338	2014-12-22			Published
2015-IPM-098903-U1P1-US	United States of America	16/792,587	2015-11-16			Published
2016-IPM-099989-U1-US	United States of America	16/341,968	2016-11-21			Published
2016-IPM-100170-U1-US	United States of America	16/305,340	2016-07-15			Published
2017-IPM-101222-U1-US	United States of America	16/817,804	2017-11-17			Published
2017-IPM-101232-U1-US	United States of America	16/642,278	2017-09-29			Published
2017-IPM-101273-U1-US	United States of America	16/645,683	2017-12-04			Published
2017-IPM-101875-U1-US	United States of America	16/026,335	2018-07-03			Published
2018-IPM-102516-U1-US	United States of America	16/434,298	2019-06-07			Published
2018-IPM-102588-U1-US	United States of America	16/549,399	2019-08-23			Published
2018-IPM-102743-U1-US	United States of America	16/753,213	2019-05-23			Published
2018-IPM-102932-U1-US	United States of America	16/559,538	2019-09-03			Published
2019-IPM-102993-U1-US	United States of America	16/517,247	2019-07-19			Published
2019-IPM-103030-U1-US	United States of America	16/559,255	2019-09-03			Published
2019-IPM-103276-U1-US	United States of America	16/928,031	2020-07-14			Published
2019-IPM-103506-U1-US	United States of America	16/841,886	2020-04-07			Published

Patent Reference	Country	Application Number	Filed Date	Patent No.	Grant Date	Status
2019-IPM-103523-U1-US	United States of America	16/842,438	2020-04-07			Published
2019-IPM-103676-U1-US	United States of America	16/882,043	2020-05-22			Published

PATENT

RECORDED: 07/02/2021

REEL: 056745 FRAME: 0574