## 503816968 05/09/2016 PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		ASSIGNMENT	
CONVEYING PARTY	ΑΤΑ		
		Name	Execution Date
KRISTIN FLETCHER	04/29/2016		
WILLIAM Y. LAM	04/28/2016		
KONGSHENG YANG	04/28/2016		
JEREMY STYER		05/02/2016	
City: State/Country: Postal Code:	RICHM VIRGII 23219		
PROPERTY NUMBERS	S Total: 6	;	
Property Type		Number	
Application Number:		15147375	
Application Number:		15147464	
Application Number:		15147404	
Application Number:		15147317	
Application Number:		15147330	
Application Number:		62193297	1

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NAME OF SUBMITTER:		KEVIN J. DUNLEAVY

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PATENT REEL: 038512 FRAME: 0929

SIGNATURE:	/Kevin J. Dunleavy/				
DATE SIGNED:	05/09/2016				
Total Attachments: 7					
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AFTON-1507US3 AFTON-1507US4 AFTON-1507US5 AFTON-1507USCIP1 AFTON-1507USCIP2 AFTON-1507USP

## ASSIGNMENT

WHEREAS, Kristin Fletcher, residing at 3520 E. Clay Street, Richmond, Virginia 23223, United States of America, William Y. Lam, residing at P.O. Box 2311, Glen Allen, Virginia 23058, United States of America, Kongsheng Yang, residing at 11813 Autumnwood Court, Glen Allen, Virginia 23059, United States of America, and Jeremy Styer, residing at 5617 Lake Sharon Drive, Glen Allen, Virginia 23060, United States of America (hereinafter referred to as, "the Assignors") are the inventors of certain invention(s) or improvement(s) for which we will make application(s) for Letters Patent to the United States of America ("United States"), as follows:

1. LUBRICANTS WITH MAGNESIUM AND THEIR USE FOR IMPROVING LOW SPEED PRE-IGNITION, and for which we filed U.S. Patent Application No. 15/147,375 on May 5, 2016, having a docket number AFTON-1507US3;

2. LUBRICANTS WITH TITANIUM AND THEIR USE FOR IMPROVING LOW SPEED PRE-IGNITION, and for which we filed U.S. Patent Application No. 15/147,464, on May 5, 2016, having a docket number AFTON-1507US4;

3. LUBRICANTS WITH ZINC DIALKYLDITHIOPHOSPHATES AND THEIR USE FOR IMPROVING LOW SPEED PRE-IGNITION, and for which we filed U.S. Patent Application No. 15/147,404 on May 5, 2016, having a docket number AFTON-1507US5;

4. LUBRICANTS WITH CALCIUM-CONTAINING DETERGENT AND THEIR USE FOR IMPROVING LOW SPEED PRE-IGNITION, and for which we filed U.S. Patent Application No. 15/147,317 on May 5, 2016, having a docket number AFTON-1507USCIP1;

5. LUBRICANTS WITH MOLYBDENUM AND THEIR USE FOR IMPROVING LOW SPEED PRE-IGNITION, and for which we filed U.S. Patent Application No. 15/147,330 on May 5, 2016, having a docket number AFTON-1507USCIP2; and

6. ADDITIVES AND LUBRICATING OIL COMPOSITIONS FOR IMPROVING LOW SPEED PRE-IGNITION, for which we filed U.S. Provisional Application No. 62/193,297, on July 16, 2015.

AFTON-1507US3 AFTON-1507US4 AFTON-1507US5 AFTON-1507USCIP1 AFTON-1507USCIP2 AFTON-1507USP

This Assignment is effective as of April 29, 2016. If not already inserted, we hereby authorize and request the law firm of Mendelsohn Dunleavy, P.C., of 1500 John F. Kennedy Blvd., Suite 312, Philadelphia, PA 19102, to insert herein the filing date(s) and application number(s) of said application(s) when known.

WHEREAS, Afton Chemical Corporation, hereinafter referred to as the ASSIGNEE, having its principal place of business at 500 Spring Street, Richmond, Virginia 23219, United States of America, is desirous of acquiring the entire right, title and interest in and to the said Patent Property in any and all countries;

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to us in hand paid by said assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements for the United States and said United States patent application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee, to file in our names applications for Letters Patent in the United States, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time a request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees, or legal representatives, and we agree to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisional, continuing and reissue applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in the United States.

## PATENT REEL: 038512 FRAME: 0932

AFTON-1507USCIP1 AFTON-1507USCIP2 AFTON-1507USP

AND we hereby authorize and request the Director of Patents and Trademarks of the United States to issue to said assignee, as assignee of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

This assignment shall be governed by the laws of the State of Virginia, United States of America.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Dated: <u>4/29/16</u> Kristin Fletcher (L.S.)

Witnessed by: Seah / Printed name: Leah Robin

AFTON-1507USCIP1 AFTON-1507USCIP2 AFTON-1507USP

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Dated: April 28.2016 1 Ch William Y. Lam (L.S.)

Witnessed by: Printed name: Robigson Leah

AFTON-1507USCIP1 AFTON-1507USCIP2 AFTON-1507USP

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Dated: 4/28/2016

\_\_\_\_\_ (L.S.) Kongsheng Yang

Witnessed by: Printed name:\_ obinson 2a

AFTON-1507USCIP1 AFTON-1507USCIP2 AFTON-1507USP

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

(L.S.) Dated: 5-2-2016 Jeremy Styer

Witnessed by Leah Robinson

PATENT REEL: 038512 FRAME: 0936

AFTON-1507USCIP1 AFTON-1507USCIP2 AFTON-1507USP

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Dated: 4.29.16

(L.S.)

Afton Chemical Corporation Name of Assignee's Representative: <u>Leah Robinson</u> Title of Assignee's Representative: <u>Patent Counsel</u>

PATENT REEL: 038512 FRAME: 0937

7