

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT
CONVEYING PARTY DATA	
Name	Execution Date
JACAM CHEMICAL COMPANY 2013, LLC	04/22/2013
RECEIVING PARTY DATA	
Name:	HSBC BANK CANADA
Street Address:	407 8th Ave. S.W.
City:	Calgary
State/Country:	CANADA
Postal Code:	T2P 1E6
PROPERTY NUMBERS Total: 14	
Property Type	Number
Patent Number:	4713184
Patent Number:	4839086
Patent Number:	5089258
Patent Number:	5474704
Patent Number:	5595679
Patent Number:	6177027
Patent Number:	6331513
Patent Number:	6358424
Patent Number:	6431279
Patent Number:	6452036
Patent Number:	6494218
Patent Number:	6774090
Patent Number:	7566687
Application Number:	13251229
CORRESPONDENCE DATA	

502322964

PATENT  
 REEL: 030292 FRAME: 0147

CH \$560.00 4713184

Fax Number: 6508494619

*Correspondence will be sent via US Mail when the fax attempt is unsuccessful.*

Phone: 650-849-4857

Email: jenny.zhang@bingham.com

Correspondent Name: Jenny Zhang

Address Line 1: 1117 S. California Avenue

Address Line 4: Palo Alto, CALIFORNIA 94304

ATTORNEY DOCKET NUMBER:

0000358780

NAME OF SUBMITTER:

Jenny Zhang

Signature:

/Jenny Zhang/

Date:

04/24/2013

Total Attachments: 10

source=Jacam\_PatentAgt#page1.tif

source=Jacam\_PatentAgt#page2.tif

source=Jacam\_PatentAgt#page3.tif

source=Jacam\_PatentAgt#page4.tif

source=Jacam\_PatentAgt#page5.tif

source=Jacam\_PatentAgt#page6.tif

source=Jacam\_PatentAgt#page7.tif

source=Jacam\_PatentAgt#page8.tif

source=Jacam\_PatentAgt#page9.tif

source=Jacam\_PatentAgt#page10.tif

**PATENT PLEDGE AND SECURITY AGREEMENT**

PATENT PLEDGE AND SECURITY AGREEMENT (this "Agreement") dated as of April 22, 2013, between JACAM CHEMICAL COMPANY 2013, LLC (the "Grantor") and HSBC BANK CANADA as Agent (as defined in the Security Agreement referred to below).

WHEREAS, in connection with and as a condition to that certain Credit Agreement, dated as of December 22, 2011, among Canadian Energy Services L.P., AES Drilling Fluids, LLC, the lenders party thereto from time to time, the Agent and HSBC Bank USA, National Association, as the U.S. Agent (as amended, supplemented, amended and restated or otherwise modified from time to time, the "Credit Agreement"), the Grantor, in its best interest, is party to a U.S. Pledge and Security Agreement, dated as of December 21, 2011 (as amended, supplemented, amended and restated or otherwise modified from time to time, the "Security Agreement"), by and among AES Drilling Fluids, LLC, AES Drilling Fluids Holdings, LLC, the Agent and the other Grantors party thereto for the ratable benefit of the Secured Parties;

WHEREAS, pursuant to the Security Agreement, the Grantor has granted to the Agent a security interest in certain of the Grantor's personal property and fixture assets, including without limitation the patents and patent applications listed on Schedule A attached hereto, all to secure the payment and performance of the Secured Obligations; and

WHEREAS, pursuant to the Security Agreement, the Grantor is required to execute and deliver to the Agent, for the benefit of the Secured Parties, an agreement in substantially the form of this Agreement;

WHEREAS, this Agreement is supplemental to the provisions contained in the Security Agreement;

NOW, THEREFORE, in consideration of the premises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

**1. DEFINITIONS.**

Capitalized terms used herein and not otherwise defined herein shall have the respective meanings provided therefor in the Credit Agreement and the Security Agreement.

**2. GRANT OF SECURITY INTEREST.**

The Grantor hereby unconditionally grants, assigns and pledges to Agent, for the benefit of the Secured Parties, to secure the Secured Obligations, a continuing security interest in all of the Grantor's right, title and interest in and to the Patent Collateral, whether now owned or hereafter acquired or arising, which includes, without limitation, the Patent Collateral with respect to those patents referred to on Schedule A (the "Security Interest"). This Agreement and the Security Interest created hereby secures the prompt and indefeasible payment in full and performance of the Secured Obligations, whether now existing or arising hereafter.

**3. AFTER-ACQUIRED PATENTS, ETC.**

The Grantor authorizes the Agent to modify this Agreement, without the necessity of the Grantor's further approval or signature, by amending Schedule A hereto to include any future or other Patent Collateral.

**4. SECURITY AGREEMENT.**

The Security Interest granted pursuant to this Agreement is granted in conjunction with the security interests granted to Agent, for the benefit of the Secured Parties, pursuant to the Security Agreement. The Grantor hereby acknowledges and affirms that the rights and remedies of the Agent with respect to the Security Interest in the Patent Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. Nothing contained in this Agreement shall be deemed to extend the time of attachment or perfection of or otherwise impair the security interest in any of the Patent Collateral granted to the Agent under the Security Agreement. To the extent there is any inconsistency between this Agreement and the Security Agreement, the Security Agreement shall control.

**5. TERMINATION.**

This Agreement shall terminate automatically upon termination of the Security Agreement.

**6. GOVERNING LAW; CONSENT TO JURISDICTION.**

This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of New York without regard to conflicts of laws principles except to the extent that the validity or perfection of the security interests hereunder, or remedies hereunder, in respect of any particular Collateral are governed by the laws of a jurisdiction other than the State of New York. The Grantor hereby agrees that service of copies of the summons and complaint and any other process which may be served in any such action or proceeding may be made by mailing or delivering a copy of such process to the Grantor at its address set forth in the Security Agreement. Nothing in this section shall affect the rights of any Secured Party to serve legal process in any other manner permitted by the law or affect the right of any Secured Party to bring any action or proceeding against the Grantor or its Property in the courts of any other jurisdiction.

THE GRANTOR IRREVOCABLY AND UNCONDITIONALLY SUBMITS, FOR ITSELF AND ITS PROPERTY, TO THE NONEXCLUSIVE JURISDICTION OF THE COURTS OF THE STATE OF NEW YORK SITTING IN NEW YORK COUNTY AND OF THE UNITED STATES DISTRICT COURT OF THE SOUTHERN DISTRICT OF NEW YORK, AND ANY APPELLATE COURT FROM ANY THEREOF, IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT, OR FOR RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT, AND THE GRANTOR IRREVOCABLY AND UNCONDITIONALLY AGREES THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION OR PROCEEDING MAY BE HEARD AND DETERMINED IN

SUCH NEW YORK STATE COURT OR, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, IN SUCH FEDERAL COURT. THE GRANTOR AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. NOTHING IN THIS AGREEMENT SHALL AFFECT ANY RIGHT THAT ANY SECURED PARTY MAY OTHERWISE HAVE TO BRING ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT AGAINST ANY OTHER GRANTOR OR ITS PROPERTIES IN THE COURTS OF ANY JURISDICTION.

**7. WAIVER OF JURY TRIAL; WAIVER OF VENUE.**

THE GRANTOR HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVES TO THE FULLEST EXTENT PERMITTED BY LAW ANY RIGHTS IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION BASED HEREON, OR ARISING OUT OF, UNDER, OR IN CONNECTION WITH, EACH DOCUMENT, OR ANY COURSE OF CONDUCT, COURSE OF DEALING, STATEMENTS (WHETHER ORAL OR WRITTEN) OR ACTIONS OF THE AGENT, ANY OTHER SECURED PARTY OR ANY OBLIGOR IN CONNECTION THEREWITH. THE GRANTOR ACKNOWLEDGES AND AGREES THAT IT HAS RECEIVED FULL AND SUFFICIENT CONSIDERATION FOR THIS PROVISION (AND EACH OTHER PROVISION OF EACH OTHER DOCUMENT TO WHICH IT IS A PARTY) AND THAT THIS PROVISION IS A MATERIAL INDUCEMENT FOR THE AGENT, EACH LENDER AND ISSUING LENDER ENTERING INTO THE DOCUMENTS.

THE GRANTOR IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LEGAL REQUIREMENT, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT IN ANY COURT REFERRED TO IN SECTION 7. THE GRANTOR HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LEGAL REQUIREMENT, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.

**8. COUNTERPARTS.**

This Agreement may be executed in counterparts, each of which shall constitute an original, but all of which when taken together shall constitute a single contract. This Agreement shall become effective when the Agent shall have received counterparts of this Agreement that, when taken together, bear the signatures of the Grantor and the Agent. Delivery of an executed signature page to this Agreement by facsimile transmission shall be as effective as delivery of a manually signed counterpart of this Agreement.

**9. AMENDMENTS, ETC.**

No amendment to or waiver of any provision of this Agreement, nor consent to any departure by the Grantor from its obligations under this Agreement, shall in any event be effective unless the same shall be in writing and signed by the Agent (on behalf of the Lenders or the Majority of the Lenders, as the case may be, pursuant to Section 16.10 of the Credit Agreement) and the Grantor and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given.

#### **10. MISCELLANEOUS.**

This Agreement is a Document executed pursuant to the Credit Agreement and shall (unless otherwise expressly indicated herein) be construed, administered and applied in accordance with the terms and provisions thereof, including Article 16 thereof.

The headings of each section of this Agreement are for convenience only and shall not define or limit the provisions thereof. This Agreement and all rights and obligations hereunder shall be binding upon the Grantor and its successors and assigns, and shall inure to the benefit of the Agent and its successors and assigns, subject to the limitations as set forth in the Credit Agreement. If any term of this Agreement shall be held to be invalid, illegal or unenforceable, the validity of all other terms hereof shall in no way be affected thereby, and this Agreement shall be construed and be enforceable as if such invalid, illegal or unenforceable term had not been included herein.

All references to instruments, documents, contracts, and agreements (including this Agreement) are references to such instruments, documents, contracts, and agreements as the same may be amended, supplemented, and otherwise modified from time to time, unless otherwise specified and shall include all schedules and exhibits thereto unless otherwise specified. The words "hereof", "herein", and "hereunder" and words of similar import when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement. The term "including" means "including, without limitation,".

[Signature Pages to Follow]

**IN WITNESS WHEREOF**, this Agreement has been executed as of the day and year first above written.

JACAM CHEMICAL COMPANY 2013, LLC, as  
Grantor

By: \_\_\_\_\_

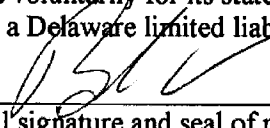
  
Name: Craig F. Nieboer

Title: Manager

CERTIFICATE OF ACKNOWLEDGMENT

PROVINCE OF Alberta )  
COUNTY OF Canada ) ss.

On this 21 day of April, 2013, before me, the undersigned notary public, personally appeared Craig F. Nieboer, proved to me through satisfactory evidence of identification, which was his driver's license, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose (as Manager for Jacam Chemical Company 2013, LLC, a Delaware limited liability company).

  
(official signature and seal of notary)

**BRADLEY D. VESCARELLI**  
My commission expires:

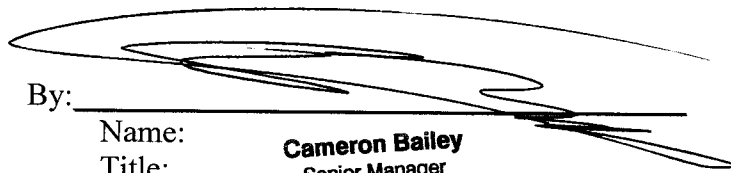
My Commission expires  
at the Pleasure of the  
Lieutenant Governor

[Patent Pledge and Security Agreement - Jacam Chemical Company 2013, LLC]

PATENT  
REEL: 030292 FRAME: 0154



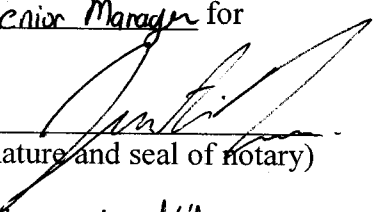
HSBC BANK CANADA, as Agent

By:   
Name: **Cameron Bailey**  
Title: **Senior Manager**  
**Syndications and Commercial Banking**  
**Prairie Region**

CERTIFICATE OF ACKNOWLEDGMENT

PROVINCE OF Alberta )  
CITY OF Calgary ) ss.

On this 12<sup>th</sup> day of April, 2013, before me, the undersigned notary public, personally appeared Cameron Bailey, proved to me through satisfactory evidence of identification, which were Permanent Residents Card; Driver's License to be the person whose name is signed on the preceding or attached document, and acknowledged to me that (he)(she) signed it voluntarily for its stated purpose (as Senior Manager for HBC Bank Canada, a Canadian Chartered Bank).

  
(official signature and seal of notary)

My commission expires: N/A

**Justin A. Turc**  
Student-at-Law

## SCHEDULE A

### Issued Patents

<b><u>Country</u></b>	<b><u>Patent No.</u></b>	<b><u>Issued Date</u></b>	<b><u>Title</u></b>
USA	4,713,184	12/15/1987	Dispersed Oil Soluble Corrosion Inhibitor & Water Soluble Phosphonate Scale Inhibitor Composition
USA	4,839,086	6/13/1989	Composition for Regenerating Cation Exchange Resin
USA	5,089,258	2/18/1992	Composition & Method for Absorbing Odors using Citric and Citrate
USA	5,474,704	12/12/1995	Regeneration Compositions for Cationic Exchange Resins
USA	5,595,679	1/21/1997	Corrosion Inhibitor
USA	6,177,027	1/23/2001	Iron Complexing Compositions Containing Stannous Chloride
USA	6,331,513	12/18/2001	Compositions for Dissolving Metal Sulfates
USA	6,358,424	3/19/2002	Process for removing cyanide ion from cadmium plating rinse waters
USA	6,431,279	8/13/2002	Process for In Situ Generation of Chlorine Dioxide In Oil & Gas Well Formations
USA	6,452,036	9/17/2002	Synthesis of Dialkyl Carbonates
USA	6,494,218	12/17/2002	Method of Removing Metal Sulfates from Surfaces
USA	6,774,090	8/10/2004	Compositions and methods for controlling downhole sulfide deposits
USA	7,566,687	7/28/2009	Methods and Compositions for removing sulfur from liquid hydrocarbons

### Pending Patent Applications

<u>Country</u>	<u>Application No.</u>	<u>Filing Date</u>	<u>Title</u>
USA	13251229	10/1/2011	Method of mitigating the effects of black powder within oil and gas pipelines