

## PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT
CONVEYING PARTY DATA	
Name	Execution Date
Logan Completion Systems Inc.	03/01/2012
RECEIVING PARTY DATA	
Name:	Wells Fargo Bank, National Association
Street Address:	1000 Louisiana Street, 9th Floor
City:	Houston
State/Country:	TEXAS
Postal Code:	77002
PROPERTY NUMBERS Total: 2	
Property Type	Number
Application Number:	12234568
Application Number:	12579358
CORRESPONDENCE DATA	
Fax Number:	(713)221-2172
Phone:	(713)223-2300
Email:	docketing@bglp.com
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>	
Correspondent Name:	Bracewell & Giuliani LLP
Address Line 1:	711 Louisiana Street
Address Line 2:	Suite 2300
Address Line 4:	Houston, TEXAS 77002
ATTORNEY DOCKET NUMBER:	088599.000077
NAME OF SUBMITTER:	Kimberly Wattner
Total Attachments: 10 source=Wells Fargo Bank Patent and Trademark Security Agreement (Executed)#page1.tif	

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## US PATENT AND TRADEMARK SECURITY AGREEMENT

This US Patent and Trademark Security Agreement dated as of March 1, 2012 (this "Patent and Trademark Security Agreement") is made by and among the subsidiaries of the Borrowers (as defined below) party hereto (each a "Grantor" and collectively the "Grantors"), and Wells Fargo Bank, National Association, as collateral agent (in such capacity, the "Collateral Agent") for the ratable benefit of the Secured Parties. Capitalized terms used herein and not otherwise defined herein shall have the meanings assigned to such terms in the US Pledge and Security Agreement (as defined below) and the Credit Agreement (as defined below).

### Preliminary Statement

Reference is made to that certain Credit Agreement dated as of March 1, 2012 (as amended, amended and restated or otherwise modified from time to time, the "Credit Agreement") among Logan Holdings, Inc., a Delaware corporation ( the "US Borrower"), Logan International Inc., a corporation amalgamated under the laws of the Province of Alberta, Canada and the direct parent company of the US Borrower (together with the US Borrower, each a "Borrower" and collectively the "Borrowers"), the Lenders, the Collateral Agent, the US Issuing Lender, the Swingline Lender, the US Administrative Agent, the Canadian Administrative Agent and the Canadian Issuing Lender. It is a requirement under the Credit Agreement that each Grantor shall enter into this Patent and Trademark Security Agreement to secure its obligations arising under or pursuant to the Credit Agreement.

Each Grantor owns the patents, patent registrations, patent applications, trademarks, trademark registrations, and trademark applications, and is a party to the patent and trademark licenses listed on Schedule I annexed hereto and by this reference incorporated herein.

Pursuant to the terms of (a) that certain Pledge and Security Agreement dated as of March 1, 2012 (as the same may be amended and in effect from time to time, the "US Pledge and Security Agreement") among the grantors party thereto from time to time (the "US Pledge and Security Grantors") in favor of the Collateral Agent for the ratable benefit of the Secured Parties and (b) that certain Security Agreement dated as of March 1, 2012 (as the same may be amended and in effect from time to time, the "Canadian Security Agreement"; and together with the US Pledge and Security Agreement, the "Security Agreement") among the grantors party thereto from time to time (the "Canadian Security Grantors"; and together with the US Pledge and Security Grantors, the "Security Grantors") in favor of the Collateral Agent for the ratable benefit of the Secured Parties, the Security Grantors have granted a security interest in the Collateral, including, without limitation, all right, title and interest of each Grantor in, to, and under all now owned and hereafter acquired Patent and Trademark Collateral (as defined below), set forth on Schedule I attached hereto, to secure the payment of all Secured Obligations.

### Agreement

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Grantor hereby grants to the Collateral Agent for the ratable benefit of the Secured Parties a security interest in all its right, title, and interest in, to,

and under the following, whether presently existing or hereafter created or acquired (the "Patent and Trademark Collateral"):

(a) (i) all letters patent throughout the world, all registrations and recordings thereof and all applications for letters patent throughout the world, including registrations, recordings and pending applications in the United States Patent and Trademark Office, (ii) all reissues, divisions, continuations, continuations-in-part, extensions, renewals or reexaminations thereof and the inventions disclosed or claimed therein, including the right to make, have made, use, sell, offer to sell, and import into the United States, the inventions disclosed or claimed therein; including but not limited to all the property set forth as "Patents" on Schedule I hereto, and (iii) all patent licenses, and other agreements providing any Grantor with the right to use any items of the type referred to in clauses (i) and (ii) above;

(b) (i) all trademarks, trade names, corporate names, company names, business names, fictitious business names, trade styles, service marks, certification marks, collective marks, logos, other source or business identifiers, designs and general intangibles of like nature, now existing or hereafter adopted or acquired, whether currently in use or not, all registrations and recordings thereof, and all registration applications filed in connection therewith, whether pending or in preparation for filing, including registrations, recordings and applications in the United States Patent and Trademark Office or in any office or agency of the United States of America, or any State thereof or any other country or political subdivision thereof or otherwise, and all common-law rights relating to the foregoing, and all extensions or renewals thereof, (ii) all trademark licenses for the grant by or to a Grantor of any right to use any trademark, (iii) all goodwill associated therewith or symbolized thereby, and (iv) all other assets, rights and interests that uniquely reflect or embody such goodwill; including but not limited to all the property set forth as "Trademarks" on Schedule I hereto; and

(c) all products and proceeds of, and rights associated with, the foregoing (including licenses, royalties income, payments, claims, damages and proceeds of infringement suits), including, without limitation, any claim by a Grantor against third parties for past, present or future (i) infringement or dilution of any patent, trademark, or patent or trademark registrations referred to in Schedule I annexed hereto, the patent or trademark registrations issued with respect to the patent or trademark applications referred to in Schedule I and the trademarks licensed under any trademark license, (ii) injury to the goodwill associated with any patent, trademark, patent or trademark registration, or patent or trademark licensed under any patent or trademark license, or (iii) breach or enforcement of any patent license, any trademark license and all rights corresponding thereto throughout the world;

provided that in no event shall the term "Patent and Trademark Collateral" include any asset or property of any Grantor which would be rendered void or voidable, or which if included in Patent and Trademark Collateral would violate, be prohibited by, or constitute a default under any agreement, contract, document or law relating thereto, would require any consent which has not been obtained, or would result in the incurrence or imposition of any penalty upon such Grantor or any Subsidiary as a result of a grant of a security interest in such asset or property.

This security interest is granted in conjunction with the security interests granted to Collateral Agent for the ratable benefit of the Secured Parties pursuant to the Security

Agreements. Each Grantor hereby acknowledges and affirms that the rights and remedies of Secured Parties with respect to the security interest in the Patent and Trademark Collateral made and granted hereby are more fully set forth in the Security Agreements, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

This Patent and Trademark Security Agreement shall be deemed a contract under, and shall be governed by, and construed and enforced in accordance with, the laws of the State of New York (including Section 5-1401 and Section 5-1402 of the General Obligations Law of the State of New York), applicable to contracts made and to be performed entirely within such state, including without regard to conflicts of laws principles.

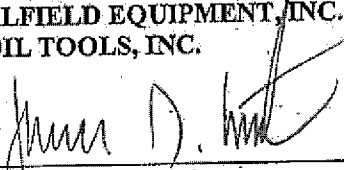
[Remainder of this page intentionally left blank. Signature pages to follow.]

IN WITNESS WHEREOF, the Collateral Agent and each Grantor has caused this Patent and Trademark Security Agreement to be duly executed by its officer duly authorized as of the date first above written.

**GRANTORS:**

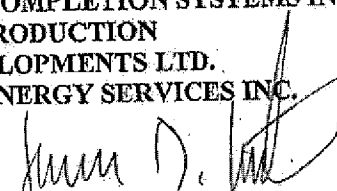
**DENNIS TOOL COMPANY  
GJS HOLDING COMPANY LLC  
KLINE OILFIELD EQUIPMENT, INC.  
LOGAN OIL TOOLS, INC.**

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

  
Lawrence D. Keister  
Chief Financial Officer and Secretary

**LOGAN COMPLETION SYSTEMS INC.  
SCOPE PRODUCTION  
DEVELOPMENTS LTD.  
XTEND ENERGY SERVICES INC.**

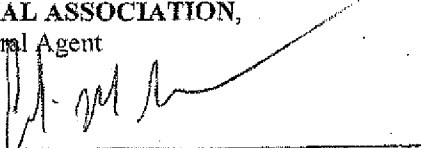
Each By: \_\_\_\_\_

  
Lawrence D. Keister  
Director

COLLATERAL AGENT:

WELLS FARGO BANK,  
NATIONAL ASSOCIATION,  
as Collateral Agent

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

  
Corbin C. Womac  
Vice President

SCHEDULES:

Schedule I Item A-Patent Collateral  
 Item B-Trademark Collateral

**Schedule I**  
**Item A – Patent Collateral**

**U.S. Patents and Patent Applications**

**GJS HOLDING COMPANY LLC**

<u>Country</u>	<u>Serial No.</u>	<u>Issued Date</u>	<u>Inventor(s)</u>	<u>Title</u>
U.S.A.	7,347,287	March 25, 2008	Roger Chancey	Hydraulic Timing Device
U.S.A.	11/241,039	September 30, 2005	Roger Chancey	Jar device

**DENNIS TOOL COMPANY**

<u>Country</u>	<u>Serial No.</u>	<u>Issued Date</u>	<u>Inventor(s)</u>	<u>Title</u>
U.S.A.	5,342,129	August 30, 1994	Thomas M. Dennis; Mahlon D. Dennis	Bearing Assembly With Sidewall-Brazed PCD Plugs
U.S.A.	5,379,854	January 10, 1995	Thomas M. Dennis	Cutting Element for Drill Bits
U.S.A.	5,452,843	September 26, 1995	Thomas M. Dennis	Method of Brazing a Composite Bit Using Direct Cooling Means
U.S.A.	5,456,329	October 10, 1995	Thomas M. Dennis; Mark Hunt	Bifurcated Drill Bit Construction
U.S.A.	5,458,211	October 17, 1995	Thomas M. Dennis; Mark Hunt	Spade Drill Bit Construction
U.S.A.	5,477,034	December 19, 1995	Thomas M. Dennis	Method and Apparatus for Bonding PDC Blanks
U.S.A.	5,498,081(1)	March 12, 1996	Thomas M. Dennis; Mahlon D. Dennis	Bearing Assembly Incorporating Shield Ring Precluding Erosion
U.S.A.	5,499,688	March 19, 1996	Mahlon D. Dennis	PDC Insert Featuring Side Spiral Wear Pads
U.S.A.	5,524,719	June 11, 1996	Mahlon D. Dennis	Internally Reinforced Polycrystalline Abrasive Insert
U.S.A.	5,544,713	August 13, 1996	Mahlon D. Dennis	Cutting Element For Drill Bits



<u>Country</u>	<u>Serial No.</u>	<u>Issued Date</u>	<u>Inventor(s)</u>	<u>Title</u>
U.S.A.	5,566,779	October 22, 1996	Thomas M. Dennis	Insert For A Drill Bit Incorporating a PDC Layer Having Extended Side Portions
U.S.A.	5,620,382(5)	April 15, 1997	Hyun S. Cho; Bong K. Lee; Yong I. Kim; Nam K. Jin; Kyoung R. Haun;	Diamond Golf Club Head
U.S.A.	5,630,479	May 20, 1997	Mahlon D. Dennis	Cutting Element for Drill Bits
U.S.A.	5,641,921	June 24, 1997	Mahlon D. Dennis; Barton Hampshire	Low Temperature, Low Pressure, Ductile, Bonded Cermet For Enhanced Abrasion and Erosion Performance
U.S.A.	5,647,449(1)	July 15, 1997	Mahlon D. Dennis	Crowned Surface with PDC Layer
U.S.A.	5,709,279	January 20, 1998	Mahlon D. Dennis	Drill Bit Insert With Sinusoidal Interface
U.S.A.	5,816,347(1)	October 6, 1998	Mahlon D. Dennis; Eric Twardowski	PDC Clad Drill Bit Insert
U.S.A.	5,848,348(2)	December 8, 1998	Mahlon D. Dennis	Method for Fabrication and Sintering Composite Inserts
U.S.A.	6,004,505(2)	December 21, 1999	Rustum Roy; Dinesh Agrawal; Jiping Cheng; Mahlon Dennis; Paul D. Gigil	Process and Apparatus for the Preparation of Particulate or Solid Parts
U.S.A.	6,011,248(2)	January 4, 2000	Mahlon D. Dennis	Method for Fabrication and Sintering Composite Inserts
U.S.A.	6,063,333(2)	May 16, 2000	Mahlon D. Dennis	Method and Apparatus for Fabrication of Cobalt Alloy Composite Inserts
U.S.A.	6,066,290(2)	May 23, 2000	Rustum Roy; Dinesh Agrawal; Mahlon Dennis; Paul D. Gigil	Method and Apparatus for Transporting Green Work Pieces Through a Microwave Sintering System
U.S.A.	6,126,895(2)	October 3, 2000	Rustum Roy; Dinesh Agrawal; Jiping Cheng; Mahlon Dennis; Paul D. Gigil	Process and Apparatus for the Preparation of Particulate or Solid Parts
U.S.A.	6,213,931	April 10, 2001	Eric Twardowski; Gordon Collier	Stump Grinding Tooth

<u>Country</u>	<u>Serial No.</u>	<u>Issued Date</u>	<u>Inventor(s)</u>	<u>Title</u>
U.S.A.	6,315,066	November 13, 2001	Mahlon D. Dennis	Microwave Sintered Tungsten Carbide Insert Featuring Thermally Stable Diamond or Grit Diamond Reinforcement
U.S.A.	6,488,103(3)	December 3, 2002	Mahlon D. Dennis; Thomas M. Dennis; Eric Twardowski	Drilling Tool and Method of Using Same
U.S.A.	6,500,226	December 21, 2002	Mahlon D. Dennis	Method and Apparatus for Fabrication of Cobalt Alloy Composite Inserts
U.S.A.	EP97935127.7(2)(4)			
U.S.A.	EP0949982A4(2)(4)			

Notes:

1. Designates patent that has expired.
2. Designates patent that may be jointly-owned with Penn State or entirely owned by Penn State; however, all such rights are licensed back to Dennis Tool Company under the License Agreement dated April 9, 1997 between Bridgetech Corporation and The Penn State Research Foundation.
3. Designates patent assigned to Gas Research Institute; however, Dennis Tool Company has a non-exclusive right to the patent under the License Agreement dated June 12, 2001 between Dennis Tool Company and Gas Research Institute amended by that certain Amendment No. 1 to License Agreement dated April 21, 2004.
4. These patents relate to U.S. Patent 6,004,505 - Process and Apparatus for the Preparation of Particulate or Solid Parts.
5. Dennis Tool Company has non-exclusive rights to this patent in exchange for paying the ongoing maintenance fees.

**LOGAN OIL TOOLS, INC.**

<u>Country</u>	<u>Serial No.</u>	<u>Issued Date</u>	<u>Inventor(s)</u>	<u>Title</u>
U.S.A.	6,425,615	July 30, 2002	George W. Mullane Jr.	Overshot Tool
U.S.A.	7,347,287	March 25, 2008	Roger Chancey	Hydraulic Timing Device

**SCOPE PRODUCTION DEVELOPMENTS LTD.**

<u>Country</u>	<u>Serial No.</u>	<u>Issued Date</u>	<u>Inventor(s)</u>	<u>Title</u>
U.S.A.	6,915,846	July 12, 2005	Kent Carriere	Production Tubing Joint

<u>Country</u>	<u>Serial No.</u>	<u>Issued Date</u>	<u>Inventor(s)</u>	<u>Title</u>
U.S.A.	7,931,078	April 26, 2011	Bart Toporowski; Perry Bateman; Dale Hockley	Stuffing Box

**LOGAN COMPLETION SYSTEMS INC.**

<u>Country</u>	<u>Serial No.</u>	<u>Filing Date</u>	<u>Inventor(s)</u>	<u>Title</u>
U.S.A.	12/234,568	September 19, 2008	Ken Manson	Enclosed Circulation Tool for a Well
U.S.A.	12/579,358	October 14, 2009	Don Turner; Steve Winkler	Method and Apparatus for Use in Selectively Fracing a Well

**XTEND ENERGY SERVICES, INC.**

<u>Country</u>	<u>Serial No.</u>	<u>Filing Date</u>	<u>Inventor(s)</u>	<u>Title</u>
U.S.A.	13/029,548	February 17, 2011	Christopher Knoschuh; Laurier Comeau	Pulse Generator

**Item B – Trademark Collateral**

**U.S. Trademarks and Trademark Applications**

**DENNIS TOOL COMPANY**

Unregistered Trademark:



**KLINE OILFIELD EQUIPMENT, INC.**

<u>Jurisdiction</u>	<u>Trademark</u>	<u>Registration Date</u>	<u>Registration Number</u>	<u>Record Owner</u>
U.S.A.	See attached.	November 14, 2006	3170721	Kline Tool Company, Inc.

**LOGAN COMPLETION SYSTEMS INC.**

<u>Jurisdiction</u>	<u>Trademark</u>	<u>Registration Date</u>	<u>Registration Number</u>	<u>Record Owner</u>
U.S.A.	MULTISTIM	May 11, 2011	85318436	Logan Completion Systems Inc.
U.S.A.	MULTISTIM	May 11, 2011	85318428	Logan Completion Systems Inc.