504454060 07/12/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4500761

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
CANYON TECHNICAL SERVICES LTD.	06/15/2017

RECEIVING PARTY DATA

Name:	COMPUTERSHARE TRUST COMPANY OF CANADA	
Street Address:	530 - 8TH AVENUE SW	
Internal Address:	SUITE 600	
City:	CALGARY	
State/Country:	CANADA	
Postal Code:	T2P 3S8	

PROPERTY NUMBERS Total: 1

Property Type	Number
Patent Number:	7875574

CORRESPONDENCE DATA

Fax Number: (416)216-3930

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.

Phone: 514-847-4243

Email: dockettor@nortonrosefulbright.com

Correspondent Name: NORTON ROSE FULBRIGHT CANADA LLP

Address Line 1: 1, PLACE VILLE MARIE

Address Line 2: SUITE 2500

Address Line 4: MONTREAL, CANADA H3B 1R1

ATTORNEY DOCKET NUMBER:	01127381-0010/C. HUNTER
NAME OF SUBMITTER:	CHRISTOPHER N. HUNTER
SIGNATURE:	/Christopher N. Hunter/
DATE SIGNED:	07/12/2017

Total Attachments: 8

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> PATENT REEL: 043176 FRAME: 0837

504454060



CANADIAN INTELLECTUAL PROPERTY SECURITY AGREEMENT

This CANADIAN INTELLECTUAL PROPERTY SECURITY AGREEMENT, dated as of June 15, 2017 (as amended, amended and restated, supplemented or otherwise modified from time to time, this **Agreement**), is made by CANYON TECHNICAL SERVICES LTD., an Alberta corporation (the **Grantor**) in favor of COMPUTERSHARE TRUST COMPANY OF CANADA, in its capacity as collateral trustee under the Intercreditor Agreement (as defined in the Security Agreement) for the benefit of the Senior Secured Parties (as defined therein) pursuant to the Intercreditor Agreement (together with its successors and assigns in such capacity, the **Collateral Trustee**).

WITNESSETH:

WHEREAS, pursuant to a joinder dated as of the date hereof (the Joinder), in respect of a Canadian Obligor Security Agreement dated as of November 12, 2015 (collectively with and as supplemented by the Joinder; as such agreement may be amended, amended and restated, supplemented or otherwise modified from time to time, the Security Agreement), made by, inter alios, the Grantor and the Collateral Trustee, the Grantor has granted to the Collateral Trustee a security interest in substantially all of such Grantor's property, including, without limitation, the Collateral referred to in Section 1 below; and

WHEREAS, pursuant to the Security Agreement, the Grantor has agreed to execute this Agreement in respect of its Collateral for recording with the Canadian Intellectual Property Office and any other office in which a security interest in the Collateral may be recorded under the laws of any other applicable jurisdiction.

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements hereinafter set forth, the Grantor and the Collateral Trustee agree as follows:

1 Grant of Security

The Grantor hereby grants to the Collateral Trustee for the benefit of the Beneficiaries (as defined in the Security Agreement) a security interest in and to all of such Grantor's right, title and interest in and to its intellectual property, whether or not such interest is joint or in common with one or more third parties or another Grantor, including the following (the **Collateral**):

- (a) all present and future Canadian and foreign patents, design patents and certificates of invention that may be developed or acquired by or on behalf of the Grantor, or similar industrial property rights, and applications for any of the foregoing, including, but not limited to, the patents set forth in Schedule A hereto opposite the name of the Grantor, as Schedule A may be supplemented from time to time by supplements to the Security Agreement and this Agreement which shall be executed and delivered by the Grantor to the Collateral Trustee from time to time, and all reissues, divisions, continuations, continuations-in-part, renewals, extensions and reexaminations thereof and amendments thereto (the Patents);
- (b) all present and future Canadian and foreign trademarks, trade names, corporate names, company names, business names, fictitious business names, internet domain names, service marks, certification marks, collective marks, logos, other source or business identifiers, designs and general intangibles of a like nature, all registrations and applications for any of the foregoing including, but not limited to, the trademark and service mark registrations, applications, and licenses set forth in Schedule B hereto opposite the name of the Grantor, as Schedule B may be supplemented from time to time by supplements to the Security Agreement and this Agreement which shall be executed and delivered by the Grantor to the Collateral Trustee from time to time, together with the goodwill connected with the use thereof and symbolized thereby and all extensions and renewals thereof (the Trademarks);

- (c) all present and future Canadian and foreign copyrights (including industrial designs and community designs), including but not limited to copyrights in software and databases, and all "topography" (as defined in the Integrated Circuit Topography Act (Canada)), whether registered or unregistered, including, without limitation, the registrations and applications and copyright licenses set forth in Schedule C hereto opposite the name of the Grantor, as Schedule C may be supplemented from time to time by supplements to the Security Agreement and this Agreement which shall be executed and delivered by the Grantor to the Collateral Trustee from time to time, and all extensions and renewals thereof (the Copyrights);
- (d) all rights of any kind whatsoever of the Grantor accruing under any of the foregoing provided by applicable law of any jurisdiction, by international treaties and conventions and otherwise throughout the world;
- (e) any and all royalties, fees, income, payments and other proceeds now or hereafter due or payable with respect to any and all of the foregoing; and
- (f) any and all claims and causes of action with respect to any of the foregoing, whether occurring before, on or after the date hereof, including all rights to and claims for damages, restitution and injunctive and other legal and equitable relief for past, present and future infringement, dilution, misappropriation, violation, misuse, breach or default, with the right but no obligation to sue for such legal and equitable relief and to collect, or otherwise recover, any such damages.

2 Security for Obligations

This Agreement secures, and the Collateral is collateral security for, with respect the Grantor, the prompt and complete payment and performance in full when due, whether at stated maturity, by required prepayment, declaration, acceleration, demand or otherwise of the Obligations (as such term is defined in the Security Agreement).

3 Scope of Security Interest

To the extent that the creation of the security interest would result in the termination of any agreement, licence or permit of the Grantor (each, a **Restricted Asset**), the security interest will not attach to the Restricted Asset but the Grantor shall hold its interest in the Restricted Asset and its proceeds in trust for the Collateral Agent, and shall assign such Restricted Asset or the proceeds thereof to the Collateral Agent or as it may direct immediately upon obtaining the consent of the other party.

The Grantor will use commercially reasonable efforts to (i) obtain all necessary consents to the assignment of such Restricted Asset to the Collateral Agent, and (ii) ensure that all agreements, licences or permits entered into or granted after the date of this Agreement expressly permit assignment to the Collateral Agent of the benefits of such agreements, licences or permits as Collateral.

4 Recordation

The Grantor authorizes and agrees that it will, at its own expense, cause this Agreement, and any supplements or amendments thereto, to be recorded at the Canadian Intellectual Property Office, the United States Trademark and Patent Office, the United States Copyright Office (and any successor office and any similar office in any United States state or other country) and at the appropriate provincial personal property security registry. Each Grantor authorizes the United States Commissioner for Patents, the United States Commissioner for Trademarks and the

United States Register of Copyrights and any other government officials to record and register this Agreement.

5 Supplemental Security

This Agreement is in addition to and without prejudice to all other security now held or which may hereafter be held by the Collateral Agent.

6 Execution in Counterparts

This Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

7 Grants, Rights and Remedies

This Agreement has been entered into in conjunction with the provisions of the Security Agreement. The Grantor does hereby acknowledge and confirm that the grant of the security interest hereunder to, and the rights and remedies of, the Collateral Trustee with respect to the Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated herein by reference as if fully set forth herein.

8 Governing Law

This Agreement shall be governed by, and construed in accordance with, the laws of the Province of Alberta and the laws of Canada applicable therein, without regard to conflict of laws principles.

[Signatures follow]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized officers as of the day and year first above written.

CANY Grant	ON TECHNICAL SERVICES LTD. as the or
Per:	M. Bahl:
	Name: Michael Baldwin
	Title: Senior VP, Finance & CFO
Per:	
	Name:
	Title:
	PUTERSHARE TRUST COMPANY OF ADA, as the Collateral Trustee
Per:	
	Name:
	Title:
Per:	
	Name:
	Title:

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized officers as of the day and year first above written.

CAN's Grant		NICAL SERVICES LTD. as the
Per:		
	Name:	
	Title:	
Per:		
	Name:	
	Title:	
	ADA, as the	ARE TRUST COMPANY OF e Collateral Trustee
Per:	Name: Title:	SHANNON GROVER MANAGER, CORPORATE TRUST
	Name: Title:	AMY WILKINSON

REEL: 043176 FRAME: 0843

Schedule A Patents and Patent Applications

Owner/Applicant	Patent	Registration/ Application No.
Canyon Technical Services Ltd.	METHOD OF TREATING A FORMATION USING DEFORMABLE PROPPANTS	2536957
Canyon Technical Services Ltd.	METHOD OF TREATING A FORMATION USING DEFORMABLE PROPPANTS	7875574

PATENT

REEL: 043176 FRAME: 0844

Schedule B Trademarks and Trademark Applications

Nil

Schedule C Copyrights and Copyright Applications

Nil.

CAN_DMS: \107491875\3
RECORDED: 07/12/2017