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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5519339

SUBMISSION TYPE:		NEW ASSIGNMENT					
		ASSIGNMENT					
		ACCICITINEI	ASSIGNMENT				
CONVEYING PARTY	DATA						
		Name	Name		Execution Date		
AVALON RESEARCH	LTD.				10/06/2017		
RECEIVING PARTY D	ΑΤΑ						
Name:	TIER 1 E	TIER 1 ENERGY SOLUTIONS INC.					
Street Address:	4253 97	4253 97 STREET NW					
City:	EDMONT	EDMONTON					
State/Country:	CANADA	CANADA					
Postal Code:	T6E 5Y7						
PROPERTY NUMBER	S Total: 2						
Property Type		Number	Number				
Application Number: 6238		381083					
Application Number: 1569		5690324					
CORRESPONDENCE	DATA						
Fax Number: (780)421-7951							
		he e-mail address first; if the interval is unsuccessful, it will be the second of the					
using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail. Email: patents.edm@bennettjones.com							
Correspondent Name	: Bl	ENNETT JONES LLP	NETT JONES LLP				
Address Line 1:			TELUS HOUSE, SOUTH TOWER, 10020 100 STREET				
Address Line 4:EDMONTON, CANADA T5J 0N3							
ATTORNEY DOCKET N	NUMBER:	72944.55	72944.55				
NAME OF SUBMITTER		EDWARD YOO	EDWARD YOO				
SIGNATURE:		/Edward Yoo/	/Edward Yoo/				
DATE SIGNED:		05/13/2019	05/13/2019				
Fotal Attachments: 5							
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• –		_1_Energy_Solutions#page3.					
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ASSIGNMENT OF INTELLECTUAL PROPERTY

THIS ASSIGNMENT OF INTELLECTUAL PROPERTY (this "**Agreement**") is made as of the 6th day of October, 2017.

BETWEEN:

AVALON RESEARCH LTD., a corporation subsisting under the laws of Alberta

(the "Assignor")

- and -

TIER 1 ENERGY SOLUTIONS INC., a corporation subsisting under the laws of British Columbia

(the "Assignee")

RECITALS:

- A. The Assignor and the Assignee entered into an asset purchase and licensing agreement dated September 20, 2016 (the "Asset Purchase Agreement"), pursuant to which, among other things, the Assignor agreed to sell, assign, transfer, convey and deliver to the Assignee agreed to purchase from the Assignor all of the Assignor's right, title and interest in and to the Transferred IP, subject to the terms and conditions set forth in the Asset Purchase Agreement; and
- B. This Agreement is delivered pursuant to the Asset Purchase Agreement.

NOW THEREFORE, for good and valuable consideration now paid by the Assignee to the Assignor pursuant to the Asset Purchase Agreement (the receipt and sufficiency of which is hereby acknowledged) the parties hereto agree as follows:

1. Definitions

All capitalized terms used but not otherwise defined in this Agreement shall have the meaning ascribed to such terms in the Asset Purchase Agreement.

2. Assignment of Transferred IP

Effective as of the date hereof, the Assignor hereby absolutely and irrevocably sells, transfers, assigns and conveys to the Assignee all of the Assignor's right, title and interest in and to the Transferred IP, including without limitation those patent applications listed in Schedule "A" attached hereto including, without limitation, any and all patent disclosures and invention disclosures, all rights of priority, reissue, divisional, continuation or continuation-in-part applications, revisions, extensions and re-examinations in connection therewith, related patent applications or any patents that may be granted and every priority right that is or may be predicated upon or arise from the

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patent applications, related patent applications or any patents that may be granted, and any and all causes of actions including all rights of recovery for past infringements of the Transferred IP. The Assignor authorizes the Assignee to pursue and prosecute patent applications in any or all countries with respect to the patent applications set out in Schedule "A", any related patent applications and any patents that may be granted.

3. Further Assurances

The Assignor covenants and agrees with the Assignee that it will from time to time and at all times thereafter, upon every reasonable request of the Assignee, make, do and execute or cause and procure to be made, done and executed all such further acts, deeds or assurances as may be reasonably required by the Assignee, whether for more effectually and completely vesting in the Assignee, the Transferred IP sold, assigned, transferred or conveyed in accordance with the Asset Purchase Agreement or for the purpose of registration or otherwise.

4. 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.

5. Entire Agreement

This Agreement, the Asset Purchase Agreement and the documents referred to therein and contemplated thereby constitute the entire agreement among the parties pertaining to the subject matter hereof and thereof, and merge all prior negotiations and drafts of the parties with regard to the transactions contemplated herein and therein.

6. Successors and Assigns

This Agreement shall enure to the benefit of the Assignee and its respective successors and assigns. This Agreement may only be assigned in accordance with Section 9.9 of the Asset Purchase Agreement.

7. Counterparts

This Agreement may be executed in two or more counterparts, each of which will be deemed an original and all of which together will constitute one instrument. Delivery by facsimile or by electronic transmission in portable document format (PDF) of an executed counterpart of this Agreement is as effective as delivery of an originally executed counterpart of this Agreement.

8. Amendments and Waivers

Any term of this Agreement may be amended only with the written consent of the Assignor and the Assignee or their respective successors and permitted assigns. Any amendment effected in accordance with this Section 8 will be binding upon the parties and their respective successors and permitted assigns.

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9. Paramountcy

This Agreement is delivered pursuant to, and is subject to, all of the terms and conditions contained in the Asset Purchase Agreement. In the event of any inconsistency between the provisions of this Agreement and the provisions of the Asset Purchase Agreement, the provisions of the Asset Purchase Agreement shall prevail.

10. Severability

If any provision of this Agreement is determined by a court of competent jurisdiction to be invalid, illegal or unenforceable in any respect, such determination shall not impair or affect the validity, legality or enforceability of the remaining provisions hereof, and each provision is hereby declared to be separate, severable and distinct.

[Signature page follows]

IN WITNESS WHEREOF the parties hereto have duly executed this Agreement on the date first written above.

AVALON/RESEARCH LTD,

By: Doug Rosten President

By:

TIER 1 ENERGY SOLUTIONS, INC.

Kevin O'Dwyer CEO and President of Operations

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PATENT **REEL: 049157 FRAME: 0288**

SCHEDULE "A"

The Assignor has filed the following patent applications with the United States Patent and Trademark Office:

Application Number	Filing Date	Title
62/381,083	August 30, 2016	RELEASABLE CONNECTION FOR A DOWNHOLE TOOL STRING New United States Provisional Patent Application
15/690,324	August 30, 2017	RELEASABLE CONNECTION FOR A DOWNHOLE TOOL STRING New United States Patent Application

The Assignor has filed the following patent application with the Canadian Intellectual Property Office:

Application Number	Filing Date	Title
2,977,187	August 24, 2017	RELEASABLE CONNECTION FOR A DOWNHOLE TOOL STRING

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RECORDED: 05/13/2019