

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5293871

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
PURIS, LLC	02/28/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CARPENTER TECHNOLOGY CORPORATION
<b>Street Address:</b>	1735 MARKET STREET
<b>Internal Address:</b>	15TH FLOOR
<b>City:</b>	PHILADELPHIA
<b>State/Country:</b>	PENNSYLVANIA
<b>Postal Code:</b>	19103
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15587584
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(703)816-4100
<i>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.</i>	
<b>Phone:</b>	703-816-4114
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<b>Correspondent Name:</b>	NIXON & VANDERHYE PC
<b>Address Line 1:</b>	901 NORTH GLEBE ROAD, 11TH FLOOR
<b>Address Line 4:</b>	ARLINGTON, VIRGINIA 22203
<b>ATTORNEY DOCKET NUMBER:</b>	4314-143
<b>NAME OF SUBMITTER:</b>	JOSEPH S. PRESTA
<b>SIGNATURE:</b>	/JOSEPH S. PRESTA/
<b>DATE SIGNED:</b>	12/20/2018
<b>Total Attachments: 5</b>	
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source=Puris#page5.tif	

## PATENT ASSIGNMENT

This PATENT ASSIGNMENT ("Assignment") is made and entered into as of the 28th of February, 2017, by and between Puris, LLC, a West Virginia limited liability company, ("Assignor"), and Carpenter Technology Corporation, a Delaware corporation ("Assignee"). Assignor and Assignee may be referred to collectively hereinafter as the "Parties."

WHEREAS, Assignor and Assignee have entered into a certain Asset Purchase Agreement dated January 30, 2017 ("Asset Purchase Agreement"), pursuant to which Assignor has agreed to assign and transfer to Assignee, and Assignee has agreed to acquire all of Assignor's right, title, and interest in and to the patents and patent applications listed on Schedule A hereof (collectively, "Patents");

AND NOW THEREFORE, in consideration of the promises, terms, and conditions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the Parties, and intending to be legally bound hereby, the Parties agree as follows:

Assignor hereby sells, assigns, transfers, conveys, and delivers to Assignee all of Assignor's right, title, and interest in and to the Patents as set forth on Schedule A, for Assignee's own use and enjoyment, and for the use and enjoyment of Assignee's successors, assigns, or other legal representatives, as fully and entirely as the same would have been held and enjoyed by Assignor if this Assignment had not been made, together with all income, royalties, or payments due or payable as of the time of this Assignment or thereafter, including, without limitation, all claims for damages by reason of past, present, or future infringement or other unauthorized use of the Patents, with the right to sue for and collect the same for Assignee's own use and enjoyment and for the use and enjoyment of its successors, assigns, or other legal representatives.

Assignor hereby authorizes the relevant patent office or governmental agency to record this Assignment of the Patents and any continuations, continuation-in-part, divisional, reissues or reexaminations thereof in the name of Assignee, as the assignee of the entire or partial right, title, and interest therein, as appropriate from the records of the relevant patent office or governmental agency, or as otherwise agreed with any third party having a partial ownership interest, in accordance with this Assignment, and to issue to Assignee all patents which may issue with respect to any applications for a patent included in the Patents.

Assignor represents, warrants, and covenants that it will, upon the reasonable request of Assignee, execute and deliver, or cause to be executed or delivered, any and all documents provided by Assignee including confirmatory assignments, powers of attorney, declarations, and the like, that may be necessary or desirable to perfect the assignment, conveyance, and transfer of the Patents hereunder. Assignor also represents, warrants, and covenants that: (i) it has the legal authority to enter into this Assignment; (ii) the execution of this Assignment will not violate any agreement to which Assignor is a party; and (iii) the execution of this Assignment will not breach any fiduciary obligation owed by Assignor to any third party.

This Assignment may be executed in one or more counterparts, all of which shall be considered one and the same agreement, and shall become effective when one or more such counterparts have been signed by each of the parties and delivered to the other party. Signatures to this Assignment transmitted by means of email or facsimile shall be deemed to constitute originals.

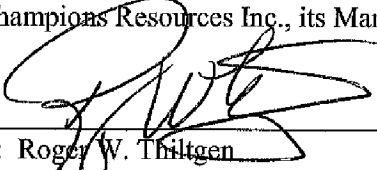
[Signature Pages to Follow]

**IN WITNESS WHEREOF**, Assignor and Assignee have caused this Assignment to be executed by their respective duly authorized representatives as of the date first set forth above.

**ASSIGNOR:**

PURIS, LLC

By: Champions Resources Inc., its Manager

By:   
Name: Roger W. Thiltgen  
Title: President

**ASSIGNEE:**

CARPENTER TECHNOLOGY CORPORATION

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

[Signature Page to Patent Assignment]

IN WITNESS WHEREOF, Assignor and Assignee have caused this Assignment to be executed by their respective duly authorized representatives as of the date first set forth above.

**ASSIGNOR:**

PURIS, LLC

By: Champion Resources, Inc., its Manager

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

Name: Roger W. Thiltgen

Title: President

**ASSIGNEE:**

CARPENTER TECHNOLOGY CORPORATION

By: James D. Dee

Name: James D. Dee

Title: Vice President, General Counsel + Secretary

**SCHEDULE A**

**PATENTS AND APPLICATIONS**

Country	Title	Pub./Pat. No.	Pub./Grant Date	App. No.	App. Date
US	Custom Titanium Alloy for 3-D Printing	<i>n/a</i>	<i>n/a</i>	62/338,018	5/18/2016
US	Method of Achieving Full Density Binder Jet Printed Metallic Articles	20160158843	6/9/2016	14/960,761	12/7/2015
US	Method of Hardening Articles and Articles Comprising the Same	20150167122	6/18/2015	14/566,769	12/11/2014
US	High Hardness, Corrosion Resistant PM Nitinol Implements and Components	9,101,984	8/11/2015	13/677,600	11/15/2012
US	Method of Making Near-Net Shapes From Powdered Metals	20130039799	2/14/2013	13/569,222	8/8/2012
US	Titanium Powder Production Apparatus and Method	20130233129	9/12/2013	13/414,769	3/8/2012
US	Method of Producing High Strength, High Stiffness and High Ductility Titanium Alloys	7,879,286	12/13/2007	11/448,160	6/7/2006
CN	Method of Producing High Strength, High Stiffness and High Ductility Titanium Alloys	101501228B	6/8/2011	200780023844	5/24/2007