## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 Assignment ID: PATI28127

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Timothy G. Veldman	02/24/2020
Ward E. TeGrotenhuis	02/24/2020
Christopher K. Clayton	02/26/2020
Paul H. Humble	02/24/2020
Richard F. Zheng	02/20/2020

#### RECEIVING PARTY DATA

Company Name:	Battelle Memorial Institute, Pacific Northwest National Laboratories
Street Address:	902 Battelle Blvd
Internal Address:	P.O. Box 999, MSIN K1-53
City:	Richland
State/Country:	WASHINGTON
Postal Code:	99352

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	17222947

#### **CORRESPONDENCE DATA**

Fax Number:

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:** 415-383-3660

**Email:** correspondence@frpatents.com

Correspondent Name: Frank Rosenberg

Address Line 1: 5737 Kanan Road, No. 190

Address Line 4: Agoura Hills, CALIFORNIA 91301

NAME OF SUBMITTER:	Paola Severich
SIGNATURE:	Paola Severich
DATE SIGNED:	02/14/2024

**Total Attachments: 5** 

source=31356EUSDIV-Assignment-as-filed-02-14-24#page1.tif

PATENT REEL: 066600 FRAME: 0386

508389387

source=31356EUSDIV-Assignment-as-filed-02-14-24#page2.tif source=31356EUSDIV-Assignment-as-filed-02-14-24#page3.tif source=31356EUSDIV-Assignment-as-filed-02-14-24#page4.tif source=31356EUSDIV-Assignment-as-filed-02-14-24#page5.tif

To

### Battelle Memorial Institute, Pacific Northwest National Laboratory

WHEREAS We (I), Ward E. TeGrotenhuis, a citizen of the United States of America residing at 8813 W. Grand Ronde, Kennewick, Washington, 99336, United States of America; Paul H. Humble, a citizen of the United States of America residing at 7022 W. 6th Avenue, Kennewick, Washington, 99336, United States of America; Christopher K. Clayton, a citizen of the United States of America residing at 5303 W. 22nd Avenue, Kennewick, Washington, 99338, United States of America; Timothy G. Veldman, a citizen of the United States of America residing at 2220 W. 5th Avenue, Kennewick, Washington, 99336, United States of America; Robert S. Wegeng, a citizen of the United States of America residing at 2603 Harris Avenue, Richland, Washington, 99354, United States of America; Richard F. Zheng, a citizen of the United States of America; Richard F. Zheng, a citizen of the United States of America; have made certain inventions for which Patent Applications, US and International, were filed as follows:

Туре	Application Number	Date Filed	Title
US	62/688,217	June 21, 2018	Enhanced Microchannel or Mesochannel Devices and Methods of Additively Manufacturing the same
US	16/449,281	June 21, 2019	Enhanced Microchannel or Mesochannel Devices and Methods of Additively Manufacturing the same

WHEREAS, Battelle Memorial Institute, Pacific Northwest National Laboratory, having offices at 901 Battelle Boulevard, P.O. Box 999, MSIN K1-53, Richland, Washington 99352, United States of America herein called "ASSIGNEE", is desirous of acquiring our entire right title and interest in said invention, and in any patent or patents to be obtained therefore;

NOW THEREFOR, To All Whom It May Concern, be it known that, for and in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred, and by these presents do sell, assign, and transfer unto the said Assignee, our full, exclusive and entire, right, title and interest in and to the invention disclosed, shown, described, or claimed in the applications identified above; and in and to any extensions, reissues, divisions, or renewals thereof. And we further assign unto the said

31356EUS

To

### Battelle Memorial Institute, Pacific Northwest National Laboratory

Assignee our whole right, title and interest in any claim to priority based on the applications identified above and for which a priority claim may be made in applications US or foreign.

And we further covenant and agree that we will, at the request and expense of the said Assignee, execute such other and further assurances of title as may be necessary or proper to fully convey the interest herein sought to be conveyed and that we will, at the request and expense of the said Assignee, execute such application papers as may be desired by the said Assignee for the filing of any associated applications, divisions or renewals of the applications identified above, or for the reissues or extension of any Letters Patent that may be granted upon said application, and will execute such Supplemental Declarations and Preliminary Statements, or other papers as desired by the said Assignee.

And we further assign unto the said Assignee our whole right, title and interest to all of the inventions disclosed in the application(s) in the United States and throughout all countries foreign to the United States, and do hereby authorize the said Assignee to apply for patents therefor in its own name in countries where such procedure is proper and to claim the benefit of the International Convention and do agree to execute applications for the said inventions in the several countries where it is necessary that the same be executed by the inventors, and to execute assignments of such applications and the patents to be obtained therefor to the said assignee, as well as all other necessary papers,

Assignee hereby acknowledges receipt of the full, exclusive and entire, right, title and interest in and to the invention disclosed, shown, described, or claimed in the applications identified above; and in and to any extensions, reissues, divisions, or renewals thereof. And we further acknowledge receipt of the whole right, title and interest in any claim to priority based on the applications identified above and for which a priority claim may be made in applications US or foreign.

31356EUS

To

## Battelle Memorial Institute, Pacific Northwest National Laboratory

#### **INVENTORS**

Inventor	
660 Taleta	2/21/2020
Signature	Date
Full Name of Inventor:	Ward E. TeGrotenhuis
Address:	Kennewick, WA 99336
Residence:	United States of America
Citizenship:	United States of America
Paul Humble	2/24/2020
Signature	Date
Full Name of Inventor:	Paul H. Humble
Address:	Kennewick, WA 99336
Residence:	United States of America
Citizenship:	United States of America
Oo Clork	2/24 (2020
Signature /	Date
Full Name of Inventor:	Christopher K. Clayton
Address:	Kennewick, WA 99338
Residence:	United States of America
Citizenship: /	United States of America
1 4/1/	
140/1 7 /m	2-24-2070
Signifture / //	Date
Fyll Name of Inventor	Timothy G. Veldman
Address: /	Kennewick, WA 99336
Residence:	United States of America
Citizenship:	United States of America

31356EUS

To

## Battelle Memorial Institute, Pacific Northwest National Laboratory

Signature

Full Name of Inventor:

Address:

Residence:

Citizenship:

Signature

Full Name of Inventor:

Address:

Residence:

Citizenship:

Date

Robert S. Wegeng
Richland, WA 99354
United States of America
United States of America

2/20/2020

Richard F. Zheng Lake Oswego, OR 97035 United States of America United States of America

To

Battelle Memorial Institute, Pacific Northwest National Laboratory

Assignee

Signature

2/26/2020

Derek Maughan

**Director of IP Legal Services** 

Battelle Memorial Institute, Pacific

**Northwest National Laboratory** 

PATENT REEL: 066600 FRAME: 0392

RECORDED: 02/26/2024