506815086 08/12/2021

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
ERIC BARNES	07/29/2021
VERNON BENSON	07/26/2021
DAVID IVANKOVICH	07/29/2021

## **RECEIVING PARTY DATA**

Name:	NORTHROP GRUMMAN SYSTEMS CORPORATION	
Street Address:	2980 FAIRVIEW PARK DRIVE	
City:	FALLS CHURCH	
State/Country:	VIRGINIA	
Postal Code:	22042-4511	

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	17400543

## **CORRESPONDENCE DATA**

**Fax Number:** (419)241-6894

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.

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Correspondent Name: SHUMAKER, LOOP & KENDRICK, LLP NORTHROP

Address Line 1: 1000 JACKSON STREET TOLEDO, OHIO 43604

ATTORNEY DOCKET NUMBER:	250957/023858-0030
NAME OF SUBMITTER:	JOHN A. MILLER
SIGNATURE:	/John A. Miller/
DATE SIGNED:	08/12/2021

## **Total Attachments: 3**

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#### **ASSIGNMENT**

WHEREAS, We, Eric Barnes, Vernon M. Benson, and David Ivankovich, hereinafter referred to as Assignors, have invented certain new and useful improvements in **ULTRASONIC CONSOLIDATION OF CONTINUOUS FILAMENT MATERIALS FOR ADDITIVE MANUFACTURING**, described in an application for United States Letters Patent, executed by us on the date as stated below;

WHEREAS, Northrop Grumman Systems Corporation, a Delaware corporation, having its principal place of business at

2980 Fairview Park Drive Falls Church, VA 22042-4511 United States of America,

hereinafter referred to as Assignee, is desirous of acquiring the entire right, title and interest in, to and under said improvements and said application:

NOW, THEREFORE, in consideration of Assignors' obligations to Northrop Grumman Systems Corporation, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor has sold, assigned, transferred and set over, and by these presents does hereby sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, Assignor's entire right, title and interest in, to and under said improvements, and said application and all divisions, renewals, continuations, and continuations-in-part thereof, and all United States Letters patent that may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent that may hereafter be filed for said improvements in any country or countries foreign to the United States, including the full right to claim for any such application the priority benefits of the International Convention for the Protection of Industrial Property and other priority-conferring treaties, and all Letters Patent that may be granted for said improvements in any country or countries foreign to the United States and all extensions, divisions, continuations, continuations-in-part, renewals and reissues thereof; and Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to said Assignee, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

Assignor hereby acknowledges that at the time of making the improvements herein identified, Assignor was under an obligation to assign to Assignee, Assignor's entire right, title and interest in, to and under said improvements;

Assignors hereby covenant that Assignor has full right to convey the interest herein assigned, and that Assignors have not executed, and will not execute, any agreement in conflict herewith and that Assignee, Northrop Grumman Systems Corporation, its successors, assigns and other legal representatives shall have the right to hold and enjoy for its and their own use and benefit, to the end of the term or terms for which such Letters Patent shall or may be granted, reissued or extended as fully and completely as the same right could have been held and enjoyed by Assignors had this Assignment not been made.

Assignor hereby further covenants and agrees to communicate to Assignee, its successors, legal representatives and assigns, any and all facts known to Assignor respecting said improvements; to promptly provide Assignee with all documents relating to said improvements, said invention, and said Letters Patent as may be known or accessible to Assignor; to testify as to the same in any interference or litigation or other legal proceedings related thereto; to sign all lawful papers, execute all extensions, continuations, continuations-in-part, divisional and reissue applications; and to make all rightful oaths or declarations and generally do everything possible to aid Assignee, its successors, legal representatives and assigns in obtaining and enforcing all the rights herein conveyed for said improvements in all countries without further compensation, but at the expense of Assignee, its successors, legal representatives and assigns.

PATENT REEL: 057161 FRAME: 0829 The undersigned has executed and delivered this instrument this 27 day of 2021, and has executed the referenced patent application on the 27 day of 2021.

Eric Barnes Assignor

The undersigned has executed and delivered this instrument this day of 2021, and has executed the referenced patent application on the 2021.

Vernon M. Benson, Assignor

The undersigned has executed and delivered this instrument this 27 day of 2021, and has executed the referenced patent application on the 2021.

PATENT REEL: 057161 FRAME: 0830

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023858-0030

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	2021 and has executed and delivered this instrument this day of
day of	2021, and has executed the referenced patent application on the, 2021.
444	Eric Barnes, Assignor
<i>T</i> <sub>day of</sub>	The undersigned has executed and delivered this instrument this Z6 day of 2021, and has executed the referenced patent application on the Z6 day of 2021.
L	Vernon M. Benson, Assignor
day of	The undersigned has executed and delivered this instrument this day of, 2021, and has executed the referenced patent application on the
	David Ivankovich, Assignor

PATENT REEL: 057161 FRAME: 0831

RECORDED: 08/12/2021