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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT4490791 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JONATHAN Z. GEHMAN	07/03/2017
GARY L. JACKSON II	06/29/2017
KHADIR A. GRIFFITH	06/29/2017

RECEIVING PARTY DATA

Name:	THE JOHNS HOPKINS UNIVERSITY
Street Address:	34TH AND CHARLES STREET
City:	BALTIMORE
State/Country:	MARYLAND
Postal Code:	21218

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15642364

CORRESPONDENCE DATA

Fax Number: (240)228-5254

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: 240-228-5640

Email: noah.hayward@jhuapl.edu

THE JOHNS HOPKINS UNIVERSITY APPLIED PHY **Correspondent Name:**

Address Line 1: 11100 JOHNS HOPKINS ROAD

Address Line 2: MAIL STOP 7-127

Address Line 4: LAUREL, MARYLAND 20723-6099

	_
ATTORNEY DOCKET NUMBER:	4232-6400
NAME OF SUBMITTER:	NOAH J. HAYWARD
SIGNATURE:	/Noah J. Hayward/
DATE SIGNED:	07/06/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 3 source=gehman#page1.tif source=griffith#page1.tif

> **PATENT REEL: 042914 FRAME: 0239**

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PATENT REEL: 042914 FRAME: 0240

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

I hereby authorize and request the Patent Office Officials in the United States and its territories and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors and assigns, to the full end of the term for which said Letters Patent may be granted. I hereby further agree to make, execute and deliver to the ASSIGNEE, its successors, assigns and legal representatives, upon request but at the expense of the ASSIGNEE, any and all papers, documents, affidavits, statements or other instruments that may be necessary in the prosecution of the aforesaid application, and of any United States or foreign applications, and of any divisions, reissues, continuations, substitutions and renewals of said application, or applications for reissues of said Letters Patents, and to aid the ASSIGNEE, its successors, assigns and legal representatives in every way in protecting said invention as may be requested, provided, however that I shall not have to pay any expenses arising from extending such assistance. LEGAL NAME OF INVENTOR Inventor: Jonathan Z. Gehman	Title of Invention	APPARATUS AND METHOD FOR COMPUTATIONAL WORKFLOW MANAGEMENT
Inited States application or PCT international application number filed on The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. WHEREAS, The Johns Hopkins University, a corporation organized and existing under the laws of the State of Maryland and having its principal place of business at Baltimore, Maryland, hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest in and to said invention and to any Letters Patent that may be generated therefore in the United States and its territories and in any and all foreign countries. NOW, THEREFORE, in consideration of my employment by the ASSIGNEE, I do hereby sell, assign and transfer to the ASSIGNEE the entire right, title and interest in and to said invention in the United States and its territories and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted for said invention in the United States and its territories and in any and all divisions, reissues, continuations, substitutions and renewals thereof. I hereby authorize and request the Patent Office Officials in the United States and its territories and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors and assigns, to the full end of the term for which said Letters Patent may be granted. I hereby further agree to make, execute and deliver to the ASSIGNEE, its successors, assigns and legal representatives, upon request but at the expense of the ASSIGNEE, any and all papers, documents, affidavits, stat	As the below name	ed inventor, I hereby declare that:
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. WHEREAS, The Johns Hopkins University, a corporation organized and existing under the laws of the State of Maryland and having its principal place of business at Baltimore, Maryland, hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest in and to said invention and to any Letters Patent that may be generated therefore in the United States and its territories and in any and all foreign countries. NOW, THEREFORE, in consideration of my employment by the ASSIGNEE, I do hereby sell, assign and transfer to the ASSIGNEE the entire right, title and interest in and to any and all Letters Patent which may be granted for said invention in the United States and its territories and in all foreign countries and the entire right, title and interest in and to any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof. I hereby authorize and request the Patent Office Officials in the United States and its territories and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors and assigns, to the full end of the term for which said Letters Patent may be granted. I hereby further agree to make, execute and deliver to the ASSIGNEE, its successors, assigns and legal representatives, upon request but at the expense of the ASSIGNEE, any and all papers, documents, affidavits, statements or other instruments that may be necessary in the prosecution of the aforesaid application, and of any United States or foreign applications, and of any divisions,	This declaration is directed to:	United States application or PCT international application number
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. WHEREAS, The Johns Hopkins University, a corporation organized and existing under the laws of the State of Maryland and having its principal place of business at Baltimore, Maryland, hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest in and to said invention and to any Letters Patent that may be generated therefore in the United States and its territories and in any and all foreign countries. NOW, THEREFORE, in consideration of my employment by the ASSIGNEE, I do hereby sell, assign and transfer to the ASSIGNEE the entire right, title and interest in and to said invention in the United States and its territories and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted for said invention in the United States and its territories and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof. I hereby authorize and request the Patent Office Officials in the United States and its territories and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors and assigns, to the full end of the term for which said Letters Patent may be granted. I hereby further agree to make, execute and deliver to the ASSIGNEE, its successors, assigns and legal representatives, upon request but at the expense of the ASSIGNEE, any and all papers, documents, affidavits, statements or other instruments that may be necessary in the prosecution of the aforesaid application, and of any United States or foreign applications, for reissues of said Letters Patents, and to aid the ASSIGNEE, its successo	The above-identifi	ed application was made or authorized to be made by me.
by line or imprisonment of not more than five (5) years, or both. WHEREAS, The Johns Hopkins University, a corporation organized and existing under the laws of the State of Maryland and having its principal place of business at Baltimore, Maryland, hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest in and to said invention and to any Letters Patent that may be generated therefore in the United States and its territories and in any and all foreign countries. NOW, THEREFORE, in consideration of my employment by the ASSIGNEE, I do hereby sell, assign and transfer to the ASSIGNEE the entire right, title and interest in and to said invention in the United States and its territories and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted for said invention in the United States and its territories and in any and all divisions, reissues, continuations, substitutions and renewals thereof. I hereby authorize and request the Patent Office Officials in the United States and its territories and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignce of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors and assigns, to the full end of the term for which said Letters Patent may be granted. I hereby further agree to make, execute and deliver to the ASSIGNEE, its successors, assigns and legal representatives, upon request but at the expense of the ASSIGNEE, any and all papers, documents, affidavits, statements or other instruments that may be necessary in the prosecution of the aforesaid application, and of any United States or foreign applications, and of any divisions, reissues, continuations, substitutions and renewals of said application, or applications, and of any divisions, reissues, continuations, substitutions and renewals of said application, or applications or reissue	I believe that I am	the original inventor or an original joint inventor of a claimed invention in the application.
Maryland and having its principal place of business at Baltimore, Maryland, hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest in and to said invention and to any Letters Patent that may be generated therefore in the United States and its territories and in any and all foreign countries. NOW, THEREFORE, in consideration of my employment by the ASSIGNEE, I do hereby sell, assign and transfer to the ASSIGNEE the entire right, title and interest in and to said invention in the United States and its territories and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted for said invention in the United States and its territories and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof. I hereby authorize and request the Patent Office Officials in the United States and its territories and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors and assigns, to the full end of the term for which said Letters Patent may be granted. I hereby further agree to make, execute and deliver to the ASSIGNEE, its successors, assigns and legal representatives, upon request but at the expense of the ASSIGNEE, in successors, documents, affidavits, statements or other instruments that may be necessary in the prosecution of the aforesaid application, and of any United States or foreign applications, and of any divisions, reissues, continuations, substitutions and renewals of said application, or applications for reissues of said Letters Patents, and to aid the ASSIGNEE, its successors, assigns and legal representatives in every way in protecting said invention as may be requested, provided, however that I shall not have to pay any expenses arising from extendin	I hereby acknowled by fine or imprisor	dge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 ment of not more than five (5) years, or both.
to the ASSIGNEE the entire right, title and interest in and to said invention in the United States and its territories and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted for said invention in the United States and its territories and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof. I hereby authorize and request the Patent Office Officials in the United States and its territories and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors and assigns, to the full end of the term for which said Letters Patent may be granted. I hereby further agree to make, execute and deliver to the ASSIGNEE, its successors, assigns and legal representatives, upon request but at the expense of the ASSIGNEE, any and all papers, documents, affidavits, statements or other instruments that may be necessary in the prosecution of the aforesaid application, and of any United States or foreign applications, and of any divisions, reissues, continuations, substitutions and renewals of said application, or applications for reissues of said Letters Patents, and to aid the ASSIGNEE, its successors, assigns and legal representatives in every way in protecting said invention as may be requested, provided, however that I shall not have to pay any expenses arising from extending such assistance. LEGAL NAME OF INVENTOR Inventor: Jonathan Z. Gehman	Maryland and having its principal place of business at Baltimore, Maryland, hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest in and to said invention and to any Letters Patent	
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representatives, upon request but at the expense of the ASSIGNEE, any and all papers, documents, affidavits, statements or other instruments that may be necessary in the prosecution of the aforesaid application, and of any United States or foreign applications, and of any divisions, reissues, continuations, substitutions and renewals of said application, or applications for reissues of said Letters Patents, and to aid the ASSIGNEE, its successors, assigns and legal representatives in every way in protecting said invention as may be requested, provided, however that I shall not have to pay any expenses arising from extending such assistance. LEGAL NAME OF INVENTOR Inventor: Jonathan Z. Gehman	I hereby authorize and request the Patent Office Officials in the United States and its territories and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors and assigns, to the full end of the term for which said Letters Patent may be granted.	
Inventor: Jonathan Z. Gehman	representatives, upon request but at the expense of the ASSIGNEE, any and all papers, documents, affidavits, statements or other instruments that may be necessary in the prosecution of the aforesaid application, and of any United States or foreign applications, and of any divisions, reissues, continuations, substitutions and renewals of said application, or applications for reissues of said Letters Patents, and to aid the ASSIGNEE, its successors, assigns and legal representatives in every way in protecting said invention as may be requested, provided, however	
1 -4- 1 m 1	LEGAL NAME OF INVENTOR	
Signature: Jonathon 3. Lehman Date: July 3, 2017	Inventor: Jonatha	n Z. Gehman
	Signature: Jovi	Mon 3. Dehman Date: July 3, 2017

JHU/APL Docket No.: 4232-6400 PATENT

REEL: 042914 FRAME: 0241

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

Title of Invention	APPARATUS AND METHOD FOR COMPUTATIONAL WORKFLOW MANAGEMENT	
As the below nam	As the below named inventor, I hereby declare that:	
This declaration is directed to:	The attached application, or United States application or PCT international application number	
The above-identifi	ed application was made or authorized to be made by me.	
l believe that I am	the original inventor or an original joint inventor of a claimed invention in the application.	
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.		
WHEREAS. The Johns Hopkins University, a corporation organized and existing under the laws of the State of Maryland and having its principal place of business at Baltimore, Maryland, hereinafter referred to as the ASSIGNEE, desires to acquire the entire right, title and interest in and to said invention and to any Letters Patent that may be generated therefore in the United States and its territories and in any and all foreign countries.		
NOW, THEREFORE, in consideration of my employment by the ASSIGNEE, I do hereby sell, assign and transfer to the ASSIGNEE the entire right, title and interest in and to said invention in the United States and its territories and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted for said invention in the United States and its territories and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.		
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LEGAL NAME OF INVENTOR		
Inventor: Khadi	A. Griffith	
Signature:	Date: 6/29/2017	
	JHU/API, Docket No.: 4232-6460	

PATENT REEL: 042914 FRAME: 0242

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

Title of Invention	APPARATUS AND METHOD FOR COMPUTATIONAL WORKFLOW MANAGEMENT
As the below named inventor, I hereby declare that:	
This declaration is directed to:	The attached application, or United States application or PCT international application number filed on
The above-identif	ied application was made or authorized to be made by me.
I believe that I am	the original inventor or an original joint inventor of a claimed invention in the application.
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LEGAL NAME OF INVENTOR	
Inventor: Gary L. Jackson II	
Signature:	24 June 2017

RECORDED: 07/06/2017

JHU/APL Docket No.: 4232-6400

PATENT

REEL: 042914 FRAME: 0243