504328937 04/19/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4375623

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MS. HAIQUAN GUO	04/13/2017
MS. FRANCES I. HURWITZ	04/13/2017

RECEIVING PARTY DATA

Name:	US GOVT ADMINISTRATOR OF NASA
Street Address:	300 E STREET, SW
City:	WASHINGTON
State/Country:	D.C.
Postal Code:	20546-0001

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15491168

CORRESPONDENCE DATA

Fax Number: (216)433-6790

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: 216-433-3663

Email: robert.earp@nasa.gov

Correspondent Name: NASA GLENN RESEARCH CENTER ROBERT H. EARP, III

Address Line 1: 21000 BROOKPARK ROAD

Address Line 2: MAIL STOP 142-7

Address Line 4: CLEVELAND, OHIO 44135

ATTORNEY DOCKET NUMBER:	LEW 19098-3
NAME OF SUBMITTER:	ROBERT H. EARP, III
SIGNATURE:	/Robert H. Earp, III/
DATE SIGNED:	04/19/2017

Total Attachments: 6

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> PATENT REEL: 042067 FRAME: 0970

RECORDATION FORM COVER SHEET			
PATENTS ONLY			
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.			
1. Name of conveying party(ies)	2. Name and address of receiving party(les)		
l	Name: United States Government Administrator of National Aeronautics and Space Administration		
Haiquan Guo	Internal Address:		
Additional name(s) of conveying party(ies) attached?			
3. Nature of conveyance/Execution Date(s):	Street Address: 300 E Street, SW		
Execution Date(s)			
Assignment Merger	Machington		
Security Agreement Change of Name	City: Washington		
Joint Research Agreement	State: DC		
Government Interest Assignment	Country: USA Zip: 20546-0001		
Executive Order 9424, Confirmatory License			
Other	Additional name(s) & address(es) attached? Yes No		
4. Application or patent number(s): This document serves as an Oath/Declaration (37 CFR 1.63)			
A. Patent Application No.(s)	B. Patent No.(s)		
15/491,168			
10,401,100			
Additional numbers att	ached? Yes No		
5. Name and address to whom correspondence	6. Total number of applications and patents		
concerning document should be mailed:	1 19 1/0 N/0 A ·		
Name: Robert H. Earp. III	involved:		
Name: Robert H. Earp, III	7. Total fee (37 CFR 1.21(h) & 3.41) \$		
Name: Robert H. Earp, III Internal Address: MS 142-7	7. Total fee (37 CFR 1.21(h) & 3.41) \$		
Internal Address: MS 142-7	7. Total fee (37 CFR 1.21(h) & 3.41) \$ Authorized to be charged to deposit account		
· · · · · · · · · · · · · · · · · · ·	7. Total fee (37 CFR 1.21(h) & 3.41) \$ Authorized to be charged to deposit account Enclosed		
Internal Address: MS 142-7 Street Address: 21000 Brookpark Road	7. Total fee (37 CFR 1.21(h) & 3.41) \$ Authorized to be charged to deposit account Enclosed None required (government interest not affecting title)		
Internal Address: MS 142-7 Street Address: 21000 Brookpark Road City: Cleveland	7. Total fee (37 CFR 1.21(h) & 3.41) \$ Authorized to be charged to deposit account Enclosed		
Internal Address: MS 142-7 Street Address: 21000 Brookpark Road	7. Total fee (37 CFR 1.21(h) & 3.41) \$ Authorized to be charged to deposit account Enclosed None required (government interest not affecting title)		
Internal Address: MS 142-7 Street Address: 21000 Brookpark Road City: Cleveland State: OH Zip: 44135 Phone Number: (216) 433-3663	7. Total fee (37 CFR 1.21(h) & 3.41) \$ Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information		
Internal Address: MS 142-7 Street Address: 21000 Brookpark Road City: Cleveland State: OHZip: 44135	7. Total fee (37 CFR 1.21(h) & 3.41) \$ Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information Deposit Account Number 14-0116		
Internal Address: MS 142-7 Street Address: 21000 Brookpark Road City: Cleveland State: OH Zip: 44135 Phone Number: (216) 433-3663	7. Total fee (37 CFR 1.21(h) & 3.41) \$ Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information		
Internal Address: MS 142-7 Street Address: 21000 Brookpark Road City: Cleveland State: OH Zip: 44135 Phone Number: (216) 433-3663 Docket Number: LEW 19098-3	7. Total fee (37 CFR 1.21(h) & 3.41) \$ Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information Deposit Account Number 14-0116		
Internal Address: MS 142-7 Street Address: 21000 Brookpark Road City: Cleveland State: OH Zip: 44135 Phone Number: (216) 433-3663 Docket Number: LEW 19098-3 Email Address: Robert.Earp@nasa.gov 9. Signature: /Robert H. Earp, III/ Signature	7. Total fee (37 CFR 1.21(h) & 3.41) \$		
Internal Address: MS 142-7 Street Address: 21000 Brookpark Road City: Cleveland State: OH Zip: 44135 Phone Number: (216) 433-3663 Docket Number: LEW 19098-3 Email Address: Robert.Earp@nasa.gov 9. Signature: /Robert H. Earp, III/ Signature Robert H. Earp, III	7. Total fee (37 CFR 1.21(h) & 3.41) \$		
Internal Address: MS 142-7 Street Address: 21000 Brookpark Road City: Cleveland State: OH Zip: 44135 Phone Number: (216) 433-3663 Docket Number: LEW 19098-3 Email Address: Robert.Earp@nasa.gov 9. Signature: /Robert H. Earp, III/ Signature	7. Total fee (37 CFR 1.21(h) & 3.41) \$		

PATENT REEL: 042067 FRAME: 0971

RECORDATION FORM COVER SHEET PATENTS ONLY

Continuation of the information for item one Name of conveying parties

Additional names of conveying parties:

Frances I. Hurwitz

PATENT REEL: 042067 FRAME: 0972



Patent Application NASA Case No. <u>LEW 19098-388</u>3

ASSIGNMENT and AGREEMENT

WHEREAS, the The Contractor, Ohio Aerospace Institute (The CONTRACTOR/GRANTEE) a corporation, and existing under the laws of the State of Ohio, and having its principal place of business at 22800 Cedar Point Road, Brook Park, OH 44142.

The said CONTRACTOR/GRANTEE having elected NOT to retain the title under the provisions of 35 U.S.C. §202 to a Subject Invention made in the performance of work under a contract/grant between the CONTRACTOR/GRANTEE and the Government of the United States of America (the Government), the Subject Invention being identified as:

TITLE: HIGH TEMPERATURE, HYDROPHOBIC, FLEXIBLE AEROGEL COMPOSITE AND METHOD OF MAKING SAME

INVENTORS:

l. <u>Haiquan Guo</u>	<u>Employer</u>	Ohio Aerospace Institute
2. Frances J. Hurwitz	Employer	<u>NASA</u>
This assignment is applicable to INVENT	ORS, (check appropriate)	
X(1),(2		
The said CONTRACTOR/GRANTEE bei	ng a:X small business,	college or university.
	other nonprofit org	ranization;
CONTRACT/GRANT NO_PROJECT		
CONTRACTOR/GRANTEE CASE NO.	LEW 19098- 38 5	
NASA CASE NO. LEW 19098-3865	APPLICATION EXECUTED	04/14/2017

The undersigned inventor(s) in recognition of an obligation as employee(s) of the CONTRACTOR/GRANTEE to assign this invention to the CONTRACTOR/GRANTEE, and pursuant to the OBLIGATIONS OF THE CONTRACTOR/GRANTEE to the Government under the above CONTRACT/GRANT, hereby assign(s) to the Government of the United States of America as represented by the Administrator of the National Aeronautics and Space Administration (NASA), the full and exclusive right in and to the said Subject Invention within the United States of America, its territories and possessions, and the entire right, title, and interest in and to said patent application, and any applications continuing therefrom and such Letters Patent as may issue therefrom.

The inventor(s) hereby covenant(s) that he/she (they) has (have) the right to grant the foregoing assignment and further agree(s) to the provisions stated below which are applicable to the inventor(s).

Further, the inventor(s) hereby assign(s) to the Government, the foreign rights in and to the said invention including rights of priority under the International Convention of Paris (1883), as amended.

Assignment small entity contractor/employee to NASA

Page 1 of 3

_04/13/2017	1	Haiquan Guo
Date	(Signature)	
	2	
Date	(Signature)	

10.

The inventor(s) and the CONTRACTOR/GRANTEE further agree to make, execute, and/or deliver to the Government, upon request, but at the expense of the Government, any and all data, drawings, notes, reports, information, papers, documents, affidavits, statements or other items necessary in the prosecution of said application and of any applications continuing therefrom or applications for reissue or reexamination of said Letters Patent, or of any foreign patent or patent application, or any application continuing therefrom, and to assist the Government in every way in protecting said invention as may be requested, provided that any expense arising through such assistance will be paid by the Government.

The CONTRACTOR/GRANTEE, having elected not to retain title under the provisions of 35 U.S.C. §202 to the Subject Invention made in the performance of work under the agreement between the CONTRACTOR/GRANTEE and NASA, hereby joins in and agrees to the foregoing assignment.

Further, the CONTRACTOR/GRANTEE except for the reservation of a license as described below, relinquishes and likewise assigns all right, title, and interest in and to such invention and patent application to the Government of the United States of America as represented by the Administrator of NASA.

The CONTRACTOR/GRANTEE hereby covenants that it has the right to make the foregoing assignment.

LICENSE TO THE CONTRACTOR/GRANTEE

- (1) The CONTRACTOR/GRANTEE shall retain a nonexclusive, royalty-free license throughout the world in the Subject Invention to which the Government obtains title. The CONTRACTOR/GRANTEE's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the CONTRACTOR/GRANTEE is a part and includes the right to grant sublicenses of the same scope to the extent the CONTRACTOR/GRANTEE was legally obligated to do so at the time the contract/grant was awarded. The license is transferable only with the approval of the National Aeronautics and Space Administration except when transferred to the successor of that part of the CONTRACTOR/GRANTEE's business to which the inventor pertains.
- (2) The CONTRACTOR/GRANTEE's domestic license may be revoked or modified by the National Aeronautics and Space Administration to the extent necessary to achieve the expeditious practical application of the Subject Invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions in the Federal Property Management Regulations and the NASA Licensing Regulations. This license shall not be revoked in that field of use or the geographical areas in which the CONTRACTOR/GRANTEE has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of the National Aeronautics and Space Administration to the extent the CONTRACTOR/GRANTEE, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.
- (3) Before revocation or modification of the license, the National Aeronautics and Space Administration will furnish the CONTRACTOR/GRANTEE a written notice of its intention to revoke or modify the license, and the CONTRACTOR/GRANTEE shall be allowed thirty days (or such other time as may be authorized by the National Aeronautics and Space Administration for good cause shown by the CONTRACTOR/GRANTEE) after the notice to show cause why the license should not be revoked or modified. The CONTRACTOR/GRANTEE has the right to appeal, in accordance with applicable NASA Licensing Regulations and the Federal Property Management

Assignment small entity contractor/employee to NASA

Page 2 of 3

Regulations concerning the licensing of Govern modification of its license.	ment-owned inventions, any decision concerning the revocation or
Signed this day of	
SIGNED:	
SIGNED:(Signature)	TITLE: Senior Scientist (Typed or Printed)
NAME: <u>Haiquan Guo</u> (Typed or Printed)	Ohio Aerospace Institute Contractor or Grantee

REEL: 042067 FRAME: 0975



Assignment to the Government (by Government Employee)

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COMPOSITE AND METHOD OF MAKING SAME

Inventor(s):

Haiquan Guo, Frances I. Hurwitz

NASA Case No.: LEW 19098-385 Application No.: 12/49/108 Filing Date: 7/19/64
WHEREAS, the parties to this Assignment and Agreement are the undersigned inventor(s) and the United States

WHEREAS, the parties to this Assignment and Agreement are the undersigned inventor(s) and the United States Government (hereafter Government), as represented by the Administrator of the National Aeronautics and Space Administration:

WHEREAS, the making of this Assignment and Agreement is in accordance with 37 CFR Part 501; and

WHEREAS, the undersigned inventor(s) has (have) executed, on the date(s) indicated below, an application for United States Patent on the above-entitled invention.

NOW THEREFORE, in consideration of employment by the Government, the undersigned hereby:

- Assign to the Government my (our) full and exclusive right in and to said invention within the United States of America, its territories and possessions, and my (our) entire right, title and interest in and to said application, and any corresponding continuation or divisional application(s) and any patent(s) that may issue therefrom
- 2. Agree to grant to the Government my (our) full and exclusive foreign rights in and to said invention, in accordance with 37 CFR 501.9(d), including rights of priority under the International Convention of Paris (1883), as amended. If the Government chooses not to file an application in any foreign country, I (we) may request rights in that country, in accordance with 37 CFR 501.9(d), and such rights will be subject to the reservation to the Government of a nonexclusive, irrevocable, royally-free license in the invention with power to grant licenses for all governmental purposes. The terms of such reservation will appear, where practicable, in any foreign patent which may issue on such invention.
- Agree, at the expense of the Government, (a) to execute any document for, (b) to deliver any requested
 information to, and (c) to cooperate in any manner with the Government in order to allow the Government to protect any
 interest transferred by this Assignment and Agreement.

troncia y.	Hunt	Cypiel 13, 2017	4// 11/00//
Signature of Inventor)	•	(Clike Assignment Executed)	(Date Application Executed)
ances I. Hurwitz oventor's Typed Nama)		3157 Montgomery Road, Shaker He (Mailing Address - Including Country)	ights, OH 44122 USA
Signature of inventor)		(Date Assignment Executed)	(Date Application Executed)
nventor's Typed Name)		(Mailing Address - Including Country)	
Signature of Inventor)		(Date Assignment Executed)	(Date Application Executed)

PATENT REEL: 042067 FRAME: 0976

RECORDED: 04/19/2017