

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3842750

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	MR MICHAEL J. PATTERSON	02/23/2016
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	US GOVERNMENT ADMINISTRATOR OF NASA	
<b>Street Address:</b>	300 E STREET SW	
<b>City:</b>	WASHINGTON	
<b>State/Country:</b>	D.C.	
<b>Postal Code:</b>	20546-0001	
<b>PROPERTY NUMBERS Total: 1</b>		
	<b>Property Type</b>	<b>Number</b>
	Patent Number:	9297368
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>	(216)433-6790	
<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>	216-433-3663	
<b>Email:</b>	ROBERT.EARP@NASA.GOV	
<b>Correspondent Name:</b>	ROBERT H. EARP, III	
<b>Address Line 1:</b>	21000 BROOKPARK ROAD	
<b>Address Line 2:</b>	MS 142-7	
<b>Address Line 4:</b>	CLEVELAND, OHIO 44135	
<b>ATTORNEY DOCKET NUMBER:</b>	LEW 18605-2	
<b>NAME OF SUBMITTER:</b>	ROBERT H. EARP, III	
<b>SIGNATURE:</b>	/ROBERT.H.EARP/III/	
<b>DATE SIGNED:</b>	04/22/2016	
<b>Total Attachments: 3</b>		
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source=NOR186052#page2.tif		
source=NOR186052#page3.tif		

**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)**

Michael J. Patterson

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

**3. Nature of conveyance/Execution Date(s):**

Execution Date(s) 2/23/16

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Joint Research Agreement  
☐ Government Interest Assignment  
☐ Executive Order 9424, Confirmatory License  
☐ Other \_\_\_\_\_

**2. Name and address of receiving party(ies)**

Name: United States Government Administrator of National Aeronautics and Space Administration

Internal Address: \_\_\_\_\_

Street Address: 300 E Street, SW

City: Washington

State: DC

Country: USA Zip: 20546-0001

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)

13/713,907

B. Patent No.(s)

9,297,368

Additional numbers attached? ☐ Yes ☒ No

**5. Name and address to whom correspondence concerning document should be mailed:**

Name: Robert H. Earp, III

Internal Address: MS 142-7

Street Address: 21000 Brookpark Road

City: Cleveland

State: OH Zip: 44135

Phone Number: (216) 433-3663

Docket Number: LEW 18605-2

Email Address: Robert.Earp@nasa.gov

**6. Total number of applications and patents involved:** \_\_\_\_\_

**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

Authorized User Name Robert H. Earp, III

**9. Signature:**

  
Signature

April 22, 2016

Date

Robert H. Earp, III

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 1

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

## **Guidelines for Completing Patents Cover Sheets (PTO-1595)**

Cover Sheet information must be submitted with each document to be recorded. If the document to be recorded concerns both patents and trademarks separate patent and trademark cover sheets, including any attached pages for continuing information, must accompany the document. All pages of the cover sheet should be numbered consecutively, for example, if both a patent and trademark cover sheet is used, and information is continued on one additional page for both patents and trademarks, the pages of the cover sheet would be numbered from 1 to 4.

### **Item 1. Name of Conveying Party(ies).**

Enter the full name of the party(ies) conveying the interest. If there is insufficient space, enter a check mark in the "Yes" box to indicate that additional information is attached. The name of the additional conveying party(ies) should be placed on an attached page clearly identified as a continuation of the information Item 1. Enter a check mark in the "No" box, if no information is contained on an attached page. If the document to be recorded is a joint research agreement, enter the name(s) of the party(ies) other than the owner of the patent or patent application as the conveying party(ies).

### **Item 2. Name and Address of Receiving Party(ies).**

Enter the name and full address of the first party receiving the interest. If there is more than one party receiving the interest, enter a check mark in the "Yes" box to indicate that additional information is attached. Enter a check mark in the "No" box, if no information is contained on an attached page. If the document to be recorded is a joint research agreement, enter the name(s) of the patent or patent application owner(s) as the receiving party.

### **Item 3. Nature of Conveyance/Execution Date(s).**

Enter the execution date(s) of the document. It is preferable to use the name of the month, or an abbreviation of that name, in order that confusion over dates is minimized. Place a check mark in the appropriate box describing the nature of the conveying document. If the "Other" box is checked, specify the nature of the conveyance.

### **Item 4. Application Number(s) or Patent Number(s).**

Indicate the application number(s), and/or patent number(s) against which the document is to be recorded. National application numbers must include both the series code and a six-digit number (e.g., 07/123,456), and international application numbers must be complete (e.g., PCT/US91/12345).

Enter a check mark in the appropriate box: "Yes" or "No" if additional numbers appear on attached pages. Be sure to identify numbers included on attached pages as the continuation of Item 4. Also enter a check mark if this Assignment is being filed as an Oath/Declaration (37 CFR 1.63).

### **Item 5. Name and Address of Party to whom correspondence concerning the document should be mailed.**

Enter the name and full address of the party to whom correspondence is to be mailed.

### **Item 6. Total Applications and Patents Involved.**

Enter the total number of applications and patents identified for recordation. Be sure to include all applications and patents identified on the cover sheet and on additional pages.

### **Block 7. Total Fee Enclosed.**

Enter the total fee enclosed or authorized to be charged. A fee is required for each application and patent against which the document is recorded.

### **Item 8. Payment Information.**

Enter the deposit account number and authorized user name to authorize charges.

### **Item 9. Signature.**

Enter the name of the person submitting the document. The submitter must sign and date the cover sheet. Enter the total number of pages including the cover sheet, attachments, and document.

This collection of information is required by 35 USC 261 and 262 and 15 USC 1057 and 1060. The information is used by the public to submit (and by the USPTO to process) patent and trademark assignment requests. After the USPTO records the information, the records for patent and trademarks, assignments, and other associated documents can be inspected by the public. To view documents recorded under secrecy orders or documents recorded due to the interest of the federal government, a written authorization must be submitted. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the form to the USPTO. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Manager of the Assignment Division, USPTO, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450.



National  
Aeronautics and  
Space  
Administration

Patent Application

## Assignment to the Government (by Government Employee)

Title of Invention: Multi-Thruster Propulsion Apparatus

Inventor(s): Michael J. Patterson

NASA Case No.: LEW 18605-2 Application No.: 13/713,907 Filing Date\*: 12/13/2012

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:

1. 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, royalty-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.

3. 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.

\*4. Authorize and request the attorneys of record in the application to insert the application number and filing date above when required.

[Signature] 02/13/16 12/13/2012  
(Signature of Inventor) (Date Assignment Executed) (Date Application Executed)  
Michael J. Patterson 3851 West 23rd St., Cleveland, OH 44109, USA  
(Inventor's Typed Name) (Mailing Address - Including Country)

\_\_\_\_\_  
(Signature of Inventor) (Date Assignment Executed) (Date Application Executed)  
\_\_\_\_\_  
(Inventor's Typed Name) (Mailing Address - Including Country)

\_\_\_\_\_  
(Signature of Inventor) (Date Assignment Executed) (Date Application Executed)  
\_\_\_\_\_  
(Inventor's Typed Name) (Mailing Address - Including Country)

NASA FORM 430 DEC 2000 PREVIOUS EDITIONS ARE OBSOLETE.

PATENT

RECORDED: 04/22/2016

REEL: 038357 FRAME: 0317