

**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)

Gary W. HUNTER, Jennifer C. XU, Chung Chiun LIU, Benjamin J. WARD

2. Name and address of receiving party(ies)Name: United States of AmericaInternal Address: As represented by the
Administrator of the National Aeronautics and
Space AdministrationAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No**3. Nature of conveyance/Execution Date(s):**Execution Date(s) August 6, August 8, and August 13, 2007

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

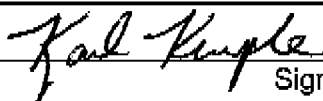
Street Address: _____

City: WashingtonState: D.C.Country: USA Zip: 20546Additional name(s) & address(es) attached? ☐ Yes ☒ No**4. Application or patent number(s):**☐ This document is being filed together with a new application.A. Patent Application No.(s)
11/754,255

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No**5. Name and address to whom correspondence concerning document should be mailed:**Name: KENNETH L. MITCHELLInternal Address: 8398-LEW-17,916-1Street Address: 9213 CHILLICOTHE ROADCity: KIRTLANDState: OHIO Zip: 44094Phone Number: 440-256-4150Fax Number: 440-256-7453Email Address: CLEVEPAT@AOL.COM**6. Total number of applications and patents involved: 1****7. Total fee (37 CFR 1.21(h) & 3.41) \$ 80**

- ☐ Authorized to be charged by credit card
☒ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Informationa. Credit Card Last 4 Numbers _____
Expiration Date _____b. Deposit Account Number 23-3060Authorized User Name Karl Kurple**9. Signature:**

Signature

Karl Kurple

Name of Person Signing

August 25, 2007

Date

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

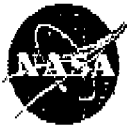
5

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**PATENT**

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CH \$40.00 233060 11754255



National
Aeronautics and
Space
Administration

Patent Application

Assignment to the Government (by Government Employee)

Title of Invention: CARBON DIOXIDE GAS SENSORS AND METHOD OF MANUFACTURING AND USING SAME

Inventor(s): Jennifer C. XU, Gary W. HUNTER, Chung Chiun LIU, and Benjamin WARD

NASA Case No.: LEW 17,916-1 Application No.: 11/754,255 Filing Date*: May 25, 2007
Docket 8398

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.

Jennifer C. Xu
(Signature of Inventor)

Jennifer C. XU

(Inventor's Typed Name)

08/13/2007
(Date Assignment Executed)

(Date Application Executed)

27058 Glenside Lane, Olmsted Township, Ohio 44138 USA

(Mailing Address - Including Country)

Gary W. Hunter
(Signature of Inventor)

Gary W. HUNTER

(Inventor's Typed Name)

8/13/2007
(Date Assignment Executed)

(Date Application Executed)

46404 Hughes Road, OBERLIN, Ohio 44074 USA

(Mailing Address - Including Country)

(Signature of Inventor)

(Date Assignment Executed)

(Date Application Executed)

(Inventor's Typed Name)

(Mailing Address - Including Country)



National Aeronautics and
Space Administration

Attorney Docket No.: 8398

ASSIGNMENT and AGREEMENT

Title of Invention: CARBON DIOXIDE GAS SENSORS AND METHOD OF MANUFACTURING AND USING SAME

Inventor: Jennifer C. XU, Gary W. HUNTER, Chung Chiun LIU, and Benjamin WARD

NASA Case No.: LEW-17916-1

Application No.*: 11/754,255

Application Filing Date*: May 25, 2007

WHEREAS, the parties to this ASSIGNMENT and AGREEMENT are: (1) the undersigned Inventor and (2) and the United States Government, as represented by the Administrator of the National Aeronautics and Space Administration, Washington, D.C. 20546 (hereafter, the Government);

WHEREAS, the undersigned Inventor is desirous of sharing in any royalties that may be derived from licensing the above identified Invention (hereinafter, the Invention) and has executed, in the date indicated below, an application for a United States Patent on the Invention or is (are) desirous of having such a patent application filed; and

WHEREAS, the Government is desirous of acquiring the entire right, title and interest in the Invention and the patent application filed, or to be filed, thereon.

NOW THEREFORE, in consideration of the payment of royalties, pursuant to NASA Policy Directive, NPD 2092.1, "Royalties and Other Payments Received by NASA from the Licensing of Patents and Patent Applications" (incorporated herein by reference), that may result from licensing the Invention, the undersigned hereby:

1. Assigns to the Government my full right in and to the Invention within the United States of America, its territories and possessions, and my entire right, title and interest in and to said patent application, and any corresponding continuation or divisional application(s) and any patent(s) that may issue therefrom.
2. Grant to the Government the option to acquire, upon request, all my (our) foreign rights in and to the Invention.

Assignment individual inventor to NASA June 2000

Page 1 of 2
In A Assignment

3. Agrees, at the expense of the Government, to: (a) execute any document, (b) deliver any requested information, and (c) cooperate in any manner with the Government in order to allow the Government to protect any interest transferred by this ASSIGNMENT and AGREEMENT.

4. Warrants that I have the authority to execute this ASSIGNMENT and AGREEMENT.

*5. Authorizes and requests the attorneys of record in the application to insert the patent application number and filing date above when required.

Chy. Ch. Li 08/08/2007
(Signature of Inventor) Date Assignment Executed Date Application Executed


Chung Chiun LIU
(Inventor's Typed Name)

2917 E. OVERLOOK ROAD, CLEVELAND HEIGHTS, OHIO 44118 USA
(Post Office Address - Including Country)

3. Agrees, at the expense of the Government, to: (a) execute any document, (b) deliver any requested information, and (c) cooperate in any manner with the Government in order to allow the Government to protect any interest transferred by this ASSIGNMENT and AGREEMENT.

4. Warrants that I have the authority to execute this ASSIGNMENT and AGREEMENT.

*5. Authorizes and requests the attorneys of record in the application to insert the patent application number and filing date above when required.

	08/06/2007	
(Signature of Inventor)	Date Assignment Executed	Date Application Executed

Benjamin WARD
(Inventor's Typed Name)

651 Brookledge Court, Northfield Center, Ohio 44067
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