| Form PTO-1595 (Rev. (| U.S. DEPARTMENT OF COMMERCE |
|---|---|
| OMB No. 0651-0027 (exp. 6/30/2008) 08 - 07 | United States Patent and Trademark Office |
| F | T , T , T , T , T , T , T , T , T , T , |
| | |
| To the Director of the U.S. Patent and 10357 | ocuments or the new address(es) below. |
| 1. Name of conveying party(ies) | 2. Name and address of receiving party(ies) |
| University of Michigan | Name: UNITED STATES AIR FORCE |
| FA9550-07-C-0144 | Internal Address: AFOSR/PK |
| Additional name(s) of conveying party(ies) attached? Yes 🗹 No | |
| 3. Nature of conveyance/Execution Date(s): | Street Address: 875 N. RANDOLPH STREET |
| Execution Date(s) 28 July 2009 | SUITE 325, RM 3112 |
| Assignment Merger | |
| Security Agreement Change of Name | City: ARLINGTON |
| Joint Research Agreement | State: VA |
| Government Interest Assignment | Country USA Zin-22202 |
| Executive Order 9424, Confirmatory License | Country: USA Zip: 22203 |
| Other | Additional 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) | B. Patent No.(s) |
| 12/506,526 | |
| | A 5 - |
| Additional numbers attached? | |
| 5. Name and address to whom correspondence concerning document should be mailed: | 6. Total number of applications and patents involved: |
| Name: UNITED STATES AIR FORCE | 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0 |
| Internal Address:AFOSR/PK | Authorized to be charged by credit card |
| Thomas y today october 1 | Authorized to be charged to deposit account |
| O A LL | Enclosed |
| Street Address: 875 N. RANDOLPH STREET | None required (government interest not affecting title) |
| City: ARLINGTON | 8. Payment Information |
| 7:m:02202 | a. Credit Card Last 4 Numbers |
| State: VA Zip:22203 | Expiration Date |
| Phone Number: 703-696-7295 | b. Deposit Account Number |
| Fax Number: 703-696-9733 | Authorized User Name |
| Email Address: geraldine.wilson@afosr.af.mil | |
| 9. Signature: Frenchenier. Wilon | 3 August 2009 |
| Signature | Total number of pages including cover |
| Cierina | sheet, attachments, and documents: |
| Name of Person Signing | 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 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

License to the United States Government

Invention Title: New Design and Applications for Nanoparticle Field Extraction Thruster

Inventor(s): Brian E Gilchrist, Alec D Gallimore, Thomas M Liu, Louis Musinski, Joanna Mirecki-Millunchick

U.S. Filing/Issue Date: <u>07/21/2009</u> / <u>00/00/00</u>

Patent or Application Serial No.: 12/506,526

Grant/Contract Numbers:: <u>USAF/AFOSR - FA9550-07-C-0144.</u>

Foreign Applications filed/intended in (countries): PCT - PCT/US2009/051340

The invention identified above is a Subject Invention under 35 U.S.C. 200, et seq., and the Standard Patent Rights clause at 37 CFR 401.14, FAR 52.227-11 or FAR 52.227-12 (if applicable) which are included among the terms of the above identified grant or contract award from the United State Government This document is confirmatory of:

- 1. The nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the invention described in any patent application and in any and all divisions, continuations, and continuations in part, and in any and all patents and re-issues granted thereon throughout the world; and
- 2. All other rights acquired by the Government by reason of the above identified grant/contract award and the laws and regulations that are applicable to the award.

The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application.

Signed this 28th day of July, 2009.

By: Michael Hallman

(Name of Grantee/Contractor Official)

(Signature)

Title: Patent Administrator

For: University of Michigan

(Grantee/Contractor Organization)

At: 1214 S. University Ave, 2nd Floor, Ann Arbor, MI 48104-2592

RECORDED: 08/06/2009

(Business Address)

PATENT REEL: 023070 FRAME: 0066