02/08/2012



| Fam PTO-1595 (e/ex. 1092) PATENTS ONLY Seatest and Trademark Office U.S. Patent Address: Name: NASA Name: NA | OMB No. 0651-0027 (exp. 6/30/2005) PATENTS ONLY To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): Rice University Additional name(s) of conveying party(ses) attached? Yes ✓ No 3. Nature of conveyance: Assignment | | 103640417 | | | | |
|---|---|---|--|-----------------------|----------------------------------|--|--|
| OMB No. 0651-0027 (exp. 6/30/2005) Tab settings → → ▼ To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): Rice University Additional name(s) of conveying party(ses) attached? Yes ✓ No 3. Nature of conveyance: | OMB No. 0651-0027 (exp. 6/30/2005) Tab settings ⇔ ⇒ ♥ To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): Rice University Additional name(s) of conveying party(ies) attached? Yes No. 3. Nature of conveying party(ies) attached? Yes No. 3. Nature of conveyance: | · · · · · · · · · · · · · · · · · · · | | | | | |
| To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): Rice University Additional name(s) of conveying party(ies) attached? Yes \[\] No 3. Nature of conveyance: Assignment | To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): Rice University Rice University | 1 ` ' | PATENTS ON | 1LY | o.o. I atom and Plademark Office | | |
| 1. Name of conveying party(les): Rice University Additional name(s) of conveying party(ies) attached? Yes \[\] No 3. Nature of conveyance: Assignment Merger Security Agreement Change of Name Other Confirmatory License 1. Assignment Security Agreement Change of Name Other Confirmatory License 1. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 12/281.444 B. Patent No.(s) Additional name(s) & address(es) attached? Yes \[\] No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Office of the General Counsel Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 Additional name(s) & address(es) attached? No.(s) B. Patent No.(s) 6. Total number of applications and patents involved: 11 7. Total fee (37 CFR 3.41) | 1. Name of conveying party(ies): Rice University Additional name(s) of conveying party(ies) attached? Yes \ No 3. Nature of conveyance: Assignment | Tab settings ⇔ ⇔ ♥ ▼ | ▼ * * * | ▼ | ▼ ▼ | | |
| Additional name(s) of conveying party(es) attached? Yes \[\] No 3. Nature of conveyance: | Additional name(s) of conveying party(es) attached? Yes No Additional name(s) of conveying party(es) attached? Yes No Assignment | To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. | | | | | |
| Additional name(s) of conveying party(es) attached? Yes \[\] No 3. Nature of conveyance: | Additional name(s) of conveying party(es) stached? Yes \[\] No 3. Nature of conveyance: Assignment | Name of conveying party(ies): | 2. Nar | me and address o | f receiving party(ies) | | |
| Additional name(s) of conveying party(ses) attached? Yes \[\] No 3. Nature of conveyance: | Additional name(s) of conveying party(es) attached? Yes \notice No 3. Nature of conveyance: Assignment | Rice University | 1 | | 7200 | | |
| Additional name(s) of conveying party(ies) attached? Yes \ \ \ \ No 3. Nature of conveyance: Assignment | Additional name(s) of conveying party(ies) attached? Yes \(\subseteq \) No 3. Nature of conveyance: Assignment | | | | Ren Paccivallo | | |
| 3. Nature of conveyance: Assignment Merger Security Agreement Change of Name Other Confirmatory License Other Confirmatory License City: Washington State: DC Zip: 20546 Additional name(s) & address(es) attached? Yes V No 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 12/281,444 B. Patent No.(s) Additional numbers attached? Yes V No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Office of the General Counsel City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE | 3. Nature of conveyance: Assignment | | Inte | ernal Address: | /& Received of | | |
| Assignment | Assignment | Additional name(s) of conveying party(ies) attache | d? Yes √ No | | ₹ FEB - 8 2012 | | |
| Assignment | Assignment | 3. Nature of conveyance: | business business control of the con | • | 5th Floor | | |
| Security Agreement Change of Name Other_Confirmatory License O1/24/12 Execution Date: O1/24/12 Execution number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 12/281,444 B. Patent No.(s) Additional numbers attached? Yes No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Suite 9T39 Office of the General Counsel Office of the General Counsel City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE | Security Agreement | | erger | | Cords Oille | | |
| City: Washington State: DC Zip: 20546 Additional name(s) & address(es) attached? Yes No 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 12/281,444 B. Patent No.(s) Additional numbers attached? Yes No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Office of the General Counsel City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE | Other_Confirmatory License Other_Confirmatory License | | Stre | eet Address: 300 | E Street, SW | | |
| City: Washington State: DC Zip: 20546 Additional name(s) & address(es) attached? Yes \(\) No 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 12/281,444 B. Patent No.(s) Additional numbers attached? Yes \(\) No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Suite 9T39 Office of the General Counsel Office of the General Counsel Street Address: 300 E Street, SW DO NOT USE THIS SPACE | City: Washington State: DC Zip: 20546 Additional name(s) & address(es) attached? Yes No 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 12/281.444 B. Patent No.(s) Additional numbers attached? Yes No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Office of the General Counsel City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE 9. Signature. Kathy Bayer Name of Person Signing City: Washington State: DC Zip: 20546 Date | | ange of Name | | | | |
| Execution Date: | Additional name(s) & address(es) attached? Yes No 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 12/281.444 B. Patent No.(s) Additional numbers attached? Yes No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Office of the General Counsel Office of the General Counsel City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE 9. Signature. Kathy Bayer Name of Person Signing Additional name(s) & address(es) attached? No No Execution date of the application is: B. Patent No.(s) 6. Total number of applications and patents involved: 11 7. Total fee (37 CFR 3.41) | ✓ Other Confirmatory License | | | | | |
| Execution Date: | Additional name(s) & address(es) attached? Yes No 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 12/281.444 B. Patent No.(s) Additional numbers attached? Yes No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Office of the General Counsel Office of the General Counsel City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE 9. Signature. Kathy Bayer Name of Person Signing Additional name(s) & address(es) attached? No No Execution date of the application is: B. Patent No.(s) 6. Total number of applications and patents involved: 11 7. Total fee (37 CFR 3.41) | | City | y:_Washington_ | State: DC Zip: 20546 | | |
| 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 12/281,444 B. Patent No.(s) For a policition and patents involved: 11 | 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 12/281,444 B. Patent No.(s) Additional numbers attached? Yes No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Office of the General Counsel Office of the General Counsel Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE 9. Signature. Kathy Bayer Name of Person Signing Name and address of party to whom correspondence on correspondence of applications and patents involved: 11 Additional numbers attached? Yes No B. Patent No.(s) B. Patent No.(s) B. Patent No.(s) Additional number of applications and patents involved: 11 Total fee (37 CFR 3.41) | 01/24/12 Execution Date: | , | | · | | |
| If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 12/281,444 B. Patent No.(s) Additional numbers attached? Yes Vo 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Office of the General Counsel Office of the General Counsel Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE | If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 12/281,444 B. Patent No.(s) Additional numbers attached? Yes \(\scalebox{No} \) No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Suite 9T39 | 4 Application number(s) or patent numb | | uonai name(s) & addie | ess(es) attached! Tes V NO | | |
| A. Patent Application No.(s) 12/281,444 B. Patent No.(s) | A. Patent Application No.(s) 12/281,444 B. Patent No.(s) | | • • | | -CAL | | |
| Additional numbers attached? Yes No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Office of the General Counsel Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 Additional numbers attached? Yes No 6. Total number of applications and patents involved: 11 7. Total fee (37 CFR 3.41)\$ Enclosed Authorized to be charged to deposit account 8. Deposit account number: | Additional numbers attached? Yes No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Suite 9T39 Office of the General Counsel Street Address: 300 E Street, SW DO NOT USE THIS SPACE 9. Signature. Additional numbers attached? Yes No 6. Total number of applications and patents involved: 11 7. Total fee (37 CFR 3.41)\$ Enclosed Authorized to be charged to deposit account 8. Deposit account number: | | 4 | | | | |
| Additional numbers attached? Yes No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Suite 9T39 Office of the General Counsel Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE | Additional numbers attached? Yes No 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Suite 9T39 Office of the General Counsel City: Washington State: DC Zip: 20546 Mame DO NOT USE THIS SPACE Kathy Bayer Kathy Bayer Name of Person Signing Additional numbers attached? Yes No 6. Total number of applications and patents involved: 11 7. Total fee (37 CFR 3.41)\$ Enclosed Authorized to be charged to deposit account 8. Deposit account number: 02/07/12 Signature. | A. Patent Application No.(s) 12/201,4 | ++ B. F | Patent No.(s) | | | |
| 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Suite 9T39 Office of the General Counsel Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE | 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Kathy Bayer Internal Address: Office of the General Counsel Street Address: 300 E Street, SW Total number of applications and patents involved: 11 Authorized to be charged to deposit account 8. Deposit account number: Total fee (37 CFR 3.41)\$ Enclosed Authorized to be charged to deposit account 8. Deposit account number: Total fee (37 CFR 3.41)\$ Do Not use This space 9. Signature. | | · | | | | |
| concerning document should be mailed: Name: Kathy Bayer Internal Address: Suite 9T39 Office of the General Counsel Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE | concerning document should be mailed: Name: Kathy Bayer Internal Address: Suite 9T39 Office of the General Counsel Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE 8. Deposit account number: DO NOT USE THIS SPACE 9. Signature. Kathy Bayer Name of Person Signing Name of Person Signing Name of Do Not Use This Space Signing Name of Date | Α | dditional numbers attached? | Yes ✓ No | | | |
| Name: Kathy Bayer Suite 9T39 | Name: Kathy Bayer Name: Suite 9T39 | · · · | | I number of applic | ations and patents involved: 11 | | |
| Suite 9T39 | Suite 9T39 | | | I foo (37 CED 3.4 | 1) ¢ | | |
| Office of the General Counsel Street Address: Office of the General Counsel Authorized to be charged to deposit account 8. Deposit account number: City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE | Office of the General Counsel Street Address: Office of the General Counsel Authorized to be charged to deposit account 8. Deposit account number: City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE 9. Signature. Kathy Bayer Name of Person Signing Signature Date | • | | 1 lee (37 CFK 3.4 | Τ) | | |
| Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE | Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE 9. Signature. Kathy Bayer Name of Person Signing Signature 8. Deposit account number: 02/07/12 Signature Date | Suite 9T39 Internal Address: | | Enclosed | | | |
| Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE | Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE 9. Signature. Kathy Bayer Name of Person Signing 8. Deposit account number: 02/07/12 Signature. | Office of the General Counsel | | Authorized to be | charged to deposit account | | |
| Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE | Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE 9. Signature. Kathy Bayer Name of Person Signing Signature Date | | | | | | |
| Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE | Street Address: 300 E Street, SW City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE 9. Signature. Kathy Bayer Name of Person Signing Signature Date | | 8 Don | ocit account numb | or: | | |
| City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE | City: Washington State: DC Zip: 20546 DO NOT USE THIS SPACE 9. Signature. Kathy Bayer Name of Person Signing Signature Do NOT USE THIS SPACE 9. Signature Double Date | Street Address: 300 E Street, SW | о. Бер | osk account num | jei. | | |
| DO NOT USE THIS SPACE | 9. Signature. Kathy Bayer Name of Person Signing DO NOT USE THIS SPACE 02/07/12 Signature Date | Street Address. | | | | | |
| DO NOT USE THIS SPACE | 9. Signature. Kathy Bayer Name of Person Signing DO NOT USE THIS SPACE 02/07/12 Signature Date | | | | | | |
| DO NOT USE THIS SPACE | 9. Signature. Kathy Bayer Name of Person Signing DO NOT USE THIS SPACE 02/07/12 Signature Date | City: Washington State: DC Zip: 208 | 546 | | • | | |
| | 9. Signature. Kathy Bayer Name of Person Signing O2/07/12 Signature Date | | DO NOT HEE THE C | DAGE | | | |
| 9. Signature. | Kathy Bayer Name of Person Signing Column | 0. Signatura | DO NOT USE THIS S | PACE | | | |
| $1/\sqrt{1}$ | Name of Person Signing Signature Date | e. Signature. | | \land | | | |
| ~ 1.16 | Name of Person Signing Signature Date | | \mathcal{M}_{-0} | 12 . | | | |
| Kathy Bayer // Lhul June 1 02/07/12 | Name of Person Signing Signature Date | Kathv Baver | Michael | Jaret | 02/07/12 | | |
| | | | Signa | iture / | Date | | |
| Name of Person Signing Sign ature // Date | rotal number of pages including/cover sheet, putachments, and documents. | | 1 711 | V | nents: 02 / 0 5 5 | | |
| Name of Person Signing Signiature // Date ■ | (Otal humber of pages including/cover specifications, and documents, see 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | | 1 711 | V | | | |

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments

Washington, D.C. 20231

washington, b.C. 2023 t



License to the Government (by Small Entity Contractor)

| Administrator of the National Aeronautics and Space Administration (NASA) and the below-named Contractor, the invention cited below is a SUBJECT INVENTION made in the performance of work under the contract, and the Contractor has elected to retain title to the SUBJECT INVENTION; or the Contractor has elected not to retain title to the SUBJECT INVENTION, and NASA, after consultation with the Contractor, has granted the request for retention of rights by the Inventor, an employee of the Contractor, subject to the provisions of 35 U.S.C. §202(d) and FAR 52.227-11; Patent Rights-Retention by the contractor, but subject to a License to the Government, as described below. |
|--|
| NOW THEREFORE, pursuant to the terms and conditions of the contract, the Contractor/Inventor does hereby grant to the Government of the United States a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States this SUBJECT INVENTION and any patents which may issue thereon throughout the world. NASA Case No.: MSC-24370-1-CU Title: FLOW DIELECTROPHORETIC SEPARATION OF SINGLE WALL CARBON NANOTUBES |
| Contractor: Rice University |
| Contract No.: NNJ05HE75A Contractor Case No.: Rice Tech ID 26081 |
| This Contractor is a (check one): small business, college or university, other nonprofit organization. |
| Inventor(s): Howard K. Schmidt, Haiqing, Manuel Joao Mendes, & Matteo Pasquali |
| At this time at least the following U.S. Patent application has been filed on the SUBJECT INVENTION. Application Serial No.: 12/281444 Filing Date: 03/02/2007 Patent No.: 8,097,141 Issue Date: 01/17/2012 The Contractor/Inventor agrees to include, within the specification of any United States patent applications and any patents issuing: |
| thereon covering this SUBJECT INVENTION, the following statement as in FAR 52.227-11(f)(4): |
| "This invention was made with Government support under contract NNJ05HE75A awarded by NASA. The Government has certain rights in this invention." |
| The Contract/Inventor further agrees to notify NASA of any decision not to continue prosecution of the application(s), pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration period required by the U.S. Patent and Trademark Office. |
| Title to this Invention is subject to the March-In-Rights by NASA as stated in 35 U.S.C. §203 and FAR 52.227-11(j). |
| The Contractor/Inventor shall furnish a copy of the patent application cited above and a listing of each country in which applications have been and are filed. Whenever a patent issues on the SUBJECT INVENTION, the patent number, the issue date, and the country shall be made known to the Government as soon as this information is available to the Contractor/Inventor. |
| (Typed name and title (if applicable) of. (1) Corporate Officer, if Contractor has elected to retain title; (Signature and Date) (Typed name and title (if applicable) of. (1) Corporate Officer, if Contractor has elected to retain title.) |
| DIRECTOR-OFFICE OF TECHNOLOGY TRANSFER |
| NACA FORM 4504 ILIN 2009 DECVIOUS EDITIONS ARE ORSOLFTE |

PATENT

REEL: 027817 FRAME: 0349

RECORDED: 02/08/2012