PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------------|----------------|
| VLADIMIR V. POPIK | 01/30/2012 |
| ANDREI A. POLOUKHTINE | 04/27/2012 |
| JASON LOCKLIN | 03/12/2012 |
| GEERT-JAN BOONS | 01/30/2012 |
| MARGARETHA WOLFERT | 01/30/2012 |
| SARA V. ORSKI | 02/02/2012 |

RECEIVING PARTY DATA

| Name: | UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC. |
|-----------------|---|
| Street Address: | BOYD GRADUATE STUDIES RESEARCH CENTER |
| City: | ATHENS |
| State/Country: | GEORGIA |
| Postal Code: | 30602-7411 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13182683 |

CORRESPONDENCE DATA

Fax Number: (612)305-1228 Phone: 6123051225

Email: struehart@mrgiplaw.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: LOREN D. ALBIN

Address Line 1: 111 3RD AVENUE SOUTH

Address Line 2: **SUITE 350**

Address Line 4: MINNEAPOLIS, MINNESOTA 55401

ATTORNEY DOCKET NUMBER: 235.01430120

REEL: 028163 FRAME: 0203

501911669

PATENT

| NAME OF SUBMITTER: | Loren D Albin |
|-------------------------------------|---------------|
| Total Attachments: 20 | |
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Whereas We, VLADIMIR V. POPIK, ANDREI A. POLOUKHTINE, JASON LOCKLIN, GEERT-JAN BOONS, MARGARETHA WOLFERT and SARA V. ORSKI, with residences and citizenships as indicated below: have made an invention in

CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

Filed: July 14, 2011

Serial No. 13/182,683

Filed: February 19, 2010

Serial No.: 12/708,617

METHODS FOR CATALYST-FREE LIGATION USING LIGHT INDUCED CLICK REACTIONS

Filed: September 1, 2009

Serial No. 61/238,835

Filed: February 19, 2009

Serial No. 61/153,762

SURFACE IMMOBILIZATION UTILIZING PHOTO-ACTIVATED COPPER-FREE CLICK CHEMISTRY

Filed: July 15, 2010

Serial No. 61/364,607

and executed an application for Letters Patent of the United States of America based thereon;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, we have individually and jointly agreed to assign and transfer and do hereby assign and transfer unto UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC., a corporation of GEORGIA, having its principal office at BOYD GRADUATE STUDIES RESEARCH CENTER, ATHENS, GEORGIA 30602-7411, its successors and assigns, the entire right, title, and interest in and to said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in said invention made by us or any of us or made jointly with others (provided any such improvement is made during, or within one year after the termination of, the employment by the Company of whichever of us, solely or jointly with one or more others, has made the same), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by us or any of us had this assignment and transfer not been made:

We do further agree for ourselves and for our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as we lawfully may, that may be deemed necessary by the Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

And we do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of said applications, to UNIVERSITY OF GEORGIA RESEARCH FOUNDATION. INC. as the assignee of the entire right, title, and interest therein.

| which may be granted upon any or said appropriately to | |
|--|--|
| FOUNDATION, INC as the assignee of the entire right, title, and interest therein. | |
| In witness whereof, we have hereunto signed our names on the days and years set forth below. | |
| 01/30/2012 | |
| Name: VLADIMIR V. POPIK Date | |
| Address: / 1111 Christian Terrace, Watkinsville, GA 30677 | |
| Citizenship: Canada | |
| STATE OF HOUSIA) | |
| COUNTY OF Claude) ss. | |
| On this 30 day of January 2012, before me personally appeared VLADIMIR V. POPIK, to me | |

On this day of d

Notary Public EXp. 1014 2014

Filed: July 14, 2011 CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

| Name: | ANDREI A. POLOUI | KHTINE | Date | |
|--|--|--|--|--------------|
| Address: | | et, Apt. E-2, Athens, GA. 3 | | |
| Citizenship: | Russia | •••,p.,,, | | |
| Old Distriction of the Control of th | | | | |
| STATE OF | |) | | |
| | |) ss. | | |
| COUNTY OF | |) | | |
| On this | day of | 2012 hefore me personal | ly appeared <u>ANDREI A. POLOUKI</u> | ITINE, to |
| me known to be | the person described in | and who executed the fores | oing instrument, and he/she executed | 1 the same |
| | purposes therein set for | | , omg mon mon , and mon one of the contract of | |
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| | | | | |
| Name: | JASON LOCKLIN | D . C. A. 00.000 | Date | |
| Address: | 1111 Cobblestone Wa | ly, Bogart, GA. 30622 | | |
| Citizenship: | USA | | | |
| STATE OF | |) | | |
| STATE OF | |) ss. | | |
| COUNTY OF | |) | | |
| | | | | |
| On this | day of | 2012, before me personal | ly appeared <u>JASON LOCKLIN</u> , to n | ae known to |
| be the person d | escribed in and who exec | outed the foregoing instrume | ent, and he/she executed the same for | the uses and |
| purposes therei | n set forth. | | | |
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| 37 . 33 1 11 | MARKET TO THE PERSON OF THE PE | and the state of t | | |
| Notary Public | | | | |

CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

| Name: | GEERT-JAN BOONS | 3 | Date |
|---|---------------------------|---------------------------------------|--|
| Address: | | k Drive, Athens, GA. 3060 | 16 |
| Citizenship: | NETHERLANDS | | |
| STATE OF | |) | |
| 517111111111111111111111111111111111111 | |) ss. | |
| COUNTY OF | |) | |
| | | | ally appeared <u>GEERT-JAN BOONS</u> , to me known |
| to be the person | described in and who e | xecuted the foregoing instr | ument, and he/she executed the same for the uses |
| and purposes th | erein set forth. | | |
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| Notary Public | | | |
| Notary Public | | | |
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| | | | |
| | | | |
| | | | |
| Name: | MARGARETHA WO | OLFERT | Date |
| Address: | | Drive, Athens, GA. 30622 | |
| Citizenship: | NETHERLANDS | · · · · · · · · · · · · · · · · · · · | - |
| • | | | • |
| STATE OF | |) | |
| | |) ss. | |
| COUNTY OF _ | |) | |
| On this | day of | 2012, before me persona | ally appeared MARGARETHA WOLFERT, to me |
| known to be the | person described in and | who executed the foregoi | ng instrument, and he/she executed the same for |
| | rposes therein set forth. | J | |
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| | | | |
| Notary Public | | | |
| Notary Public | | | |

CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

| Name: | SARA V. ORSKI | Date |
|---------------|-----------------------------------|---|
| Address: | 10518 Apple Ridge Road, Gaith | |
| Citizenship: | USA | |
| STATE OF |) | |
| |) ss. | |
| COUNTY OF _ |) | |
| | scribed in and who executed the f | efore me personally appeared <u>SARA V. ORSKI</u> , to me known to bregoing instrument, and he/she executed the same for the uses and |
| Notary Public | | |

Whereas We, VLADIMIR V. POPIK, ANDREI A. POLOUKHTINE, JASON LOCKLIN, GEERT-JAN BOONS, MARGARETHA WOLFERT and SARA V. ORSKI, with residences and citizenships as indicated below; have made an invention in

CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM Filed: July 14, 2011 Serial No. 13/182,683

Filed: February 19, 2010 Serial No.: 12/708,617

METHODS FOR CATALYST-FREE LIGATION USING LIGHT INDUCED CLICK REACTIONS

Filed: September 1, 2009 Serial No. 61/238,835 Filed: February 19, 2009 Serial No. 61/153,762

SURFACE IMMOBILIZATION UTILIZING PHOTO-ACTIVATED COPPER-FREE CLICK CHEMISTRY
Filed: July 15, 2010 Serial No. 61/364,607

and executed an application for Letters Patent of the United States of America based thereon;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, we have individually and jointly agreed to assign and transfer and do hereby assign and transfer unto UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC., a corporation of GEORGIA, having its principal office at BOYD GRADUATE STUDIES RESEARCH CENTER, ATHENS, GEORGIA 30602-7411, its successors and assigns, the entire right, title, and interest in and to said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in said invention made by us or any of us or made jointly with others (provided any such improvement is made during, or within one year after the termination of, the employment by the Company of whichever of us, solely or jointly with one or more others, has made the same), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by us or any of us had this assignment and transfer not been made;

We do further agree for ourselves and for our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as we lawfully may, that may be deemed necessary by the Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

And we do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of said applications, to UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC., as the assignee of the entire right, title, and interest therein.

In witness whereof, we have hereunto signed our names on the days and years set forth below.

| Name: | VLADIMIR V. POPIK | | | Date | |
|------------------|-------------------------|-----------------|------------------|---------------------------------------|------|
| Address: | 1111 Christian Terrace | , Watkinsville, | GA 30677 | | |
| Citizenship: | Canada | | | | , . |
| STATE OF | |) | , | | |
| | |) ss. | | | |
| COUNTY OF _ | | _) | | , | |
| On this | day of | 2012, before m | ne personally ap | ppeared <u>VLADIMIR V. POPIK</u> , to | o me |
| | | | | strument, and he/she executed the | |
| the uses and pur | oses therein set forth. | | | | |
| | | | | | |
| Notary Public | | | | | |

CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

| | <i>Í</i> | 1 | | | |
|--------------------------------------|---|---------------------------------|--|--|---|
| | A SUPPLY | | | 04/27 | /2012 |
| Name: Address: Citizenship: | ANDREA POLO 9974 E. Acacia Dri Russia | UKHTINE ve, Scottsdale, AZ 8 | 35260 | Date | <u>.</u> |
| , 1V | - ~ | | | | • |
| | trizona |) ss. | | | |
| COUNTY OF _ | Maricopa | 3 ; | | | |
| On this 27 | th day of AONO | 2012, before m | e personally appe | ared ANDREI | A. POLOUKHTINE, to |
| | the person described purposes therein set f | in and who execute | d the foregoing in | strument, and h | e/she executed the same |
| Ama | Sneth | SUN | THE STATE OF THE S | ANNA LIZE | THIOVA |
| Notary Public | 0 | , | | Notary Public, St. Maricopa My Commissi January 3 | 01a - 1 a · · · · · · · · · · · · · · · · · · |
| | | | · m· | January 3 | 1, 2016 |
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| | | | | | |
| Name: Address: | JASON LOCKLIN 1111 Cobblestone V | Nov Pogort GA 2 | 0622 | Date | • |
| Citizenship: | USA | vay, Bogan, GA. 3 | | | |
| STATE OF | | , | | | |
| BIAIL OI | |) ss. | | | |
| COUNTY OF _ | |) | | | |
| On this | day of | 2012, before m | e personally appe | ared JASON LC | OCKLIN, to me known to |
| be the person de purposes therein | | ecuted the foregoin | g instrument, and | he/she executed | the same for the uses and |
| Parkonn motou | . God Los Mai | | | | |
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| Notary Public | | | | | |

Serial No. 13/182,683 Filed: July 14, 2011 CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

| Name: | GEERT-JAN BOON | S . | | D | ate | |
|-----------------|---------------------------|----------------|--------------|-------------------|-------------------|-----------------|
| Address: | 1321 Lake Wellbroo | k Drive, Ather | s, GA. 3060 | 6 | · | |
| Citizenship: | NETHERLANDS | ŕ | | | | • |
| • | | | | | * | |
| STATE OF | |) | | | | |
| | |) ss. | | | | |
| COUNTY OF | | j j | | | * | |
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| On this | day of | 2012, befor | e me persona | ally appeared GE | ERT-JAN BOO | NS, to me known |
| | described in and who e | | | | | |
| and purposes th | erein set forth. | | | | | |
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| Notary Public | | | | | | |
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| | | | | | | , |
| Name: | MARGARETHA WO | | | | ate | |
| Address: | 1321 Lake Wellbrook | c Drive, Athen | s, GA. 30622 | 2 | | |
| Citizenship: | NETHERLANDS | | | | | |
| | • | | | | • | |
| STATE OF | · | ? | | | | |
| COMMENTOR | |) ss. | | | | |
| COUNTY OF _ | | | | | | |
| 0-45- | | | | | | |
| Un this | day of | 2012, befor | e me persona | illy appeared MA | RGARETHA W | OLFERT, to me |
| | person described in and | u wno execute | the foregon | ng instrument, ar | nd ne/sne execute | d the same for |
| the uses and pu | rposes therein set forth. | | | , | | |
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| Notary Public | | | | | | |
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Serial No. 13/182,683 Filed: July 14, 2011

CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

| Name: | SARA V. ORSK | I | Date | |
|------------------------------------|----------------|------------------------------|---|--------------|
| Address: | 10518 Apple Ri | dge Road, Gaithersburg, MI | 20886 | |
| Citizenship: | USA | | | |
| STATE OF | |) | | |
| | |) ss. | | |
| COUNTY OF | |) | | |
| On this | day of | 2012, before me per | sonally appeared SARA V. ORSKI, to me | known to |
| be the person d purposes therei | | o executed the foregoing ins | trument, and he/she executed the same for | the uses and |
| | | | | |
| Notary Public | | | | |

Whereas We, VLADIMIR V. POPIK, ANDREI A. POLOUKHTINE, JASON LOCKLIN, GEERT-JAN BOONS, MARGARETHA WOLFERT and SARA V. ORSKI, with residences and citizenships as indicated below; have made an invention in

CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

Filed: July 14, 2011 Serial No. 13/182,683
Filed: February 19, 2010 Serial No.: 12/708,617

METHODS FOR CATALYST-FREE LIGATION USING LIGHT INDUCED CLICK REACTIONS

Filed: September 1, 2009 Serial No. 61/238,835 Filed: February 19, 2009 Serial No. 61/153,762

SURFACE IMMOBILIZATION UTILIZING PHOTO-ACTIVATED COPPER-FREE CLICK CHEMISTRY
Filed: July 15, 2010 Serial No. 61/364,607

and executed an application for Letters Patent of the United States of America based thereon;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, we have individually and jointly agreed to assign and transfer and do hereby assign and transfer unto UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC., a corporation of GEORGIA, having its principal office at BOYD GRADUATE STUDIES RESEARCH CENTER, ATHENS, GEORGIA 30602-7411, its successors and assigns, the entire right, title, and interest in and to said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in said invention made by us or any of us or made jointly with others (provided any such improvement is made during, or within one year after the termination of, the employment by the Company of whichever of us, solely or jointly with one or more others, has made the same), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by us or any of us had this assignment and transfer not been made;

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And we do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of said applications, to UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC., as the assignee of the entire right, title, and interest therein.

In witness whereof, we have hereunto signed our names on the days and years set forth below.

| Name: | VLADIMIR V. POPII | K | Date | |
|-----------------|--------------------------|--|----------------------------------|--------------------|
| Address: | 1111 Christian Terrac | e, Watkinsville, GA 30677 | | |
| Citizenship: | Canada | | • | |
| STATE OF | | | | |
| | |) ss. | | |
| COUNTY OF _ | |) | | |
| On this | day of | _ 2012, before me personally | y appeared <u>VLADIMIR V. PC</u> | <u>PIK</u> , to me |
| known to be the | person described in and | who executed the foregoing | instrument, and he/she execut | ted the same for |
| | poses therein set forth. | , | | |
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| Notary Public | | STATE OF THE PROPERTY OF THE P | | |

Filed: July 14, 2011 CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

| | | Date |
|------------------|--|---|
| Name: | ANDREI A. POLOUKHTINE | |
| Address: | 1520 S. Lumpkin Street, Apt. E-2, Athens, GA. | 30003 |
| Citizenship: | Russia | |
| STATE OF |) ss. .) | |
| COUNTY OF _ | <u> </u> | |
| On this | day of2012, before me person | ally appeared ANDREI A. POLOUKHTINE, to |
| me known to be | e the person described in and who executed the for | egoing manument, and not she executed the same |
| for the uses and | purposes therein set forth. | |
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| | | |
| Notary Public | | |
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| | | |
| | | 3/12/12 |
| Name: | JASON LOCKLIN | Date |
| Address: | 1111 Cobblestone Way, Bogart, GA. 30622 | |
| Citizenship: | USA | |
| STATE OF | Clarke)ss. | |
| COUNTY OF | OCOTTEC) | |
| On this 12 | th day of MOCh 2012 before me person | ally appeared JASON LOCKLIN, to me known to |
| be the person d | lescribed in and who executed the foregoing instru | ment, and he/she executed the same for the uses and |
| purposes there | in set forth. | |
| $\int M \Omega$ | Colland Cal | |
| Notary Public | 00000 | |
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CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

| Name: | GEERT-JAN BOONS | | Date |
|------------------|-----------------------------------|----------------------------|---|
| Address: | 1321 Lake Wellbrook Drive, A | Athens, GA. 30606 | |
| Citizenship: | | | |
| STATE OF |) | | |
| DIALE OF |) ss. | | |
| COUNTY OF |)) ss. | | |
| On this | day of 2012, t | pefore me personally appe | ared <u>GEERT-JAN BOONS</u> , to me known |
| to be the person | described in and who executed the | ne foregoing instrument, a | nd he/she executed the same for the uses |
| and purposes th | erein set forth. | | |
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| Notary Public | | | |
| Notary Public | | | |
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| | | | |
| | | | |
| Name: | MARGARETHA WOLFERT | | Date |
| Address: | 1321 Lake Wellbrook Drive, A | thens, GA. 30622 | |
| Citizenship: | NETHERLANDS | • | |
| - | | • | |
| STATE OF |)) ss. | | |
| |) ss. | • | |
| COUNTY OF |) | | |
| On this | dov. of 2012 1 | pefore me personally appe | ared MARGARETHA WOLFERT, to me |
| known to be the | nerson described in and who exe | cuted the foregoing instru | ment, and he/she executed the same for |
| | rposes therein set forth. | outon are reregement men. | |
| are about and po | | | |
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| Notary Public | | | |

Assignment Serial No. 13/182,683 Filed: July 14, 2011

Filed: July 14, 2011 CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

| Name: | SARA V. ORSKI | Date |
|--------------------------------------|----------------------------|---|
| Address: | 10518 Apple Ridge Road, Ga | ithersburg, MD 20886 |
| Citizenship: | USA. | |
| STATE OF |) | |
| |) s | S. |
| COUNTY OF _ |) | |
| | | before me personally appeared SARA V. ORSKI , to me known to |
| be the person de purposes therein | | e foregoing instrument, and he/she executed the same for the uses and |
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| | | |
| Notary Public | | |

Whereas We, VLADIMIR V. POPIK, ANDREI A. POLOUKHTINE, JASON LOCKLIN, GEERT-JAN BOONS, MARGARETHA WOLFERT and SARA V. ORSKI, with residences and citizenships as indicated below; have made an invention in

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METHODS FOR CATALYST-FREE LIGATION USING LIGHT INDUCED CLICK REACTIONS

Filed: September 1, 2009 Filed: February 19, 2009 Serial No. 61/238,835 Serial No. 61/153,762

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Filed: July 15, 2010 Serial No. 61/364,607

and executed an application for Letters Patent of the United States of America based thereon;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, we have individually and jointly agreed to assign and transfer and do hereby assign and transfer unto UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC., a corporation of GEORGIA, having its principal office at BOYD GRADUATE STUDIES RESEARCH CENTER, ATHENS, GEORGIA 30602-7411, its successors and assigns, the entire right, title, and interest in and to said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in said invention made by us or any of us or made jointly with others (provided any such improvement is made during, or within one year after the termination of, the employment by the Company of whichever of us, solely or jointly with one or more others, has made the same), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by us or any of us had this assignment and transfer not been made;

We do further agree for ourselves and for our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as we lawfully may, that may be deemed necessary by the Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

And we do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of said applications, to UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC., as the assignee of the entire right, title, and interest therein.

In witness whereof, we have hereunto signed our names on the days and years set forth below.

| Name: | VLADIMIR V. POPIK | Date |
|------------------|--|--|
| Address: | 1111 Christian Terrace, Watkinsville, GA 30677 | |
| Citizenship: | Canada | |
| STATE OF |) | |
| |) ss. | |
| COUNTY OF _ |) | |
| On this | day of 2012, before me personally | appeared VLADIMIR V. POPIK, to me |
| known to be the | person described in and who executed the foregoing i | instrument, and he/she executed the same for |
| the uses and pur | poses therein set forth. | |
| | | |
| Notary Public | | |

Assignment Page 2 of 4 Serial No. 13/182,683 Filed: July 14, 2011 CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

| Name: | ANDREI A. POLOUKH | | a | Date | |
|------------------|--------------------------------------|-----------------|---------------------|------------------------------|----------------|
| Address: | 1520 S. Lumpkin Street, | Apt. E-2, Ather | ıs, GA. 30605 | | |
| Citizenship: | Russia | | | | |
| STATE OF | |) | | | |
| DIAIL OI | |) ss. | | | |
| COUNTY OF _ | | .) | • | | |
| • | day of2 | | nerconally annears | A ANDREI A POLOUK | HTINE to |
| On this | day of the person described in an | d who evecuted | the foregoing instr | ument and he/she execut | ed the same |
| for the uses and | purposes therein set forth. | u who excented | the totogoing mon | annomi, and not one of the | |
| ioi me ases and | purposes morem ser form. | | | | |
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| Notary Public | | | | | |
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| | | | | | |
| Name: | JASON LOCKLIN | | | Date | |
| Address: | 1111 Cobblestone Way, | Bogart, GA. 30 | 622 | | |
| Citizenship: | USA | | | | |
| - | | | | | |
| STATE OF | | .) | | | |
| | |) ss. | | e e | |
| COUNTY OF _ | | .) | | | |
| | | 2010 1 6 | 11 | -4 TARONT LOCKT IN to | ma lengum to |
| On this | day of | 2012, before me | personally appeare | ed <u>JASON LUCKLIN</u> , to | me known to |
| be the person de | scribed in and who execut | ed me foregoing | g mstrument, and ne | systie executed the same i | or me ases and |
| purposes therein | set forth. | | | | |
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| | | | | | |
| Notary Public | | | | | |

Assignment Serial No. 13/182,683 Filed: July 14, 2011

Filed: July 14, 2011
CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

| M300ms | MAN | 30/ | 2012 |
|--|-----------------|---------------|--------------|
| Name: GEERT-JAN BOONS | Date | | |
| Address: 1321 Lake Wellbrook Drive, Athens, GA. 30606 | | | |
| Citizenship: NETHERLANDS | | | |
| STATE OF GEORGIA. | | | |
| COUNTY OF MAGGET) | | | |
| On this 30 day of Junuary 2012, before me personally appeared | GEERT-JAN | BOONS, | o me known |
| to be the person described in and who executed the foregoing instrument, and h | e/she executed | the same | for the uses |
| and purposes therein set forth. | | | |
| 1 And Leaves | | | |
| Notary Rublic | | | |
| LYNN BERRYMAN | | | ŕ |
| NOTARY PUBLIC | | | |
| MADISON COUNTY, GEORGIA | | | |
| MY COMMISSION EXPIRES OCTOBER 6, 2014 | | | |
| MIT COMMINISSION EATINES COTOLETO, 2014 | $\overline{}$ | | |
| He | 191 | <u> 1 30.</u> | 2012 |
| Name: MARGARETHA WOLFERT | Date / | | |
| Address: 1321 Lake Wellbrook Drive, Athens, GA. 30622 | | | |
| Citizenship: NETHERLANDS | | | |
| OTATE OF COMMAND | | | |
| STATE OF (SCOTAIN) ss. | | | |
| COUNTY OF Mulis 1) | | | |
| On this 30 day of Jaman 2012, before me personally appeared | MARGARET | HA WOL | FERT, to me |
| known to be the person described in and who executed the foregoing instrumen | t, and he/she e | xecuted th | e same for |
| the uses and purposes therein set forth. | | | |
| luna Leuran- | | | |
| Notary Public YNN BERRYMAN | | | |
| NOTARY PUBLIC | | | |
| MADISON COUNTY, GEORGIA | | | |
| MY COMMISSION EXPIRES OCTOBER 6, 2014 | | | |

Assignment Page 4 of 4 Serial No. 13/182,683 Filed: July 14, 2011 CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

| Name: | SARA V. ORSKI | Date |
|---------------|--|------|
| Address: | 10518 Apple Ridge Road, Gaithersburg, MD 20886 | |
| Citizenship: | USA | • |
| STATE OF |) | |
| COUNTY OF | , | |
| | day of 2012, before me personally appearable in and who executed the foregoing instrument, an set forth. | |
| Notary Public | • | а |

Whereas We, VLADIMIR V. POPIK, ANDREI A. POLOUKHTINE, JASON LOCKLIN, GEERT-JAN BOONS, MARGARETHA WOLFERT and SARA V. ORSKI, with residences and citizenships as indicated below; have made an invention in

CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM Serial No. 13/182,683 Filed: July 14, 2011 Serial No.: 12/708,617 Filed: February 19, 2010 METHODS FOR CATALYST-FREE LIGATION USING LIGHT INDUCED CLICK REACTIONS Serial No. 61/238,835 Filed: September 1, 2009 Serial No. 61/153,762 Filed: February 19, 2009 SURFACE IMMOBILIZATION UTILIZING PHOTO-ACTIVATED COPPER-FREE CLICK CHEMISTRY Serial No. 61/364,607 Filed: July 15, 2010 and executed an application for Letters Patent of the United States of America based thereon; Now, therefore, for good and valuable consideration, receipt of which is acknowledged, we have individually and jointly agreed to assign and transfer and do hereby assign and transfer unto UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC., a corporation of GEORGIA, having its principal office at BOYD GRADUATE STUDIES RESEARCH CENTER, ATHENS, GEORGIA 30602-7411, its successors and assigns, the entire right, title, and interest in and to said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in said invention made by us or any of us or made jointly with others (provided any such improvement is made during, or within one year after the termination of, the employment by the Company of whichever of us, solely or jointly with one or more others, has made the same), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by us or any of us had this assignment and transfer not been made; We do further agree for ourselves and for our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as we lawfully may, that may be deemed necessary by the Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries; And we do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of said applications, to UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC., as the assignee of the entire right, title, and interest therein. In witness whereof, we have hereunto signed our names on the days and years set forth below.

Notary Public

Assignment Serial No. 13/182,683 Filed: July 14, 2011

Filed: July 14, 2011 CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

| | | | | | | - |
|------------------|--|-------------------|----------------|-------------------------|---|---------------------|
| Name: | ANDREI A. POLOUKI | HTINE | • | Da | ate | |
| Address: | 1520 S. Lumpkin Street | t, Apt. E-2, Athe | ens, GA. 3060 |)5 | | |
| Citizenship: | Russia | | | | | |
| STATE OF | |)) ss. | | | | |
| COUNTY OF _ | | _) | • | | | |
| On this | day of | 2012, before m | e personally a | appeared AN | <u>DREI A. POLC</u> | OUKHTINE, to |
| me known to be | the person described in a | nd who executed | d the foregoin | ng instrument | , and he/she ex | ecuted the same |
| for the uses and | purposes therein set forth | l . | - | | | |
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| Notary Public | | | | | | |
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| Name: | JASON LOCKLIN | | | $\overline{\mathbf{D}}$ | ate | |
| Address: | 1111 Cobblestone Way | , Bogart, GA. 3 | 0622 | | | |
| Citizenship: | USA | | | | | |
| STATE OF | |) | | • | | |
| STATE OF | |) ss. | | | | |
| COUNTY OF | |) | | | | |
| | | 2010 1 5 | | AT bereamen | CONTROCKT IN | I to me known to |
| On this | day of escribed in and who execu | 2012, before m | e personany i | appeared <u>JA:</u> | executed the sai | ne for the uses and |
| purposes therei | escribed in and who exect a set forth | Hen me roregon | ig manumone | , and norono | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| burboses merer | a set totut. | | | | | |
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| Notary Public | | | | | | |

Assignment Page 3 of 4
Serial No. 13/182,683
Filed: July 14, 2011
CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

| Name: | GEERT-JAN BOONS | | | Date | |
|------------------|---|----------------------|--|---------------|--|
| Address: | 1321 Lake Wellbrook | Drive, Athens, GA. 3 | 30606 | 4 | |
| Citizenship: | NETHERLANDS | | | | |
| | | | | | |
| STATE OF | P |)) ss. | | | • |
| COUNTY OF _ | |) ss.) | | | · |
| | day of | | sonally appeared | GEERT-JAN | BOONS, to me known |
| to be the person | described in and who exe | cuted the foregoing | instrument, and h | e/she execute | d the same for the uses |
| and purposes the | | | | , , | |
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| | | • | | | |
| Name: | MARGARETHA WOL | | | Date | |
| Address: | 1321 Lake Wellbrook I | Orive, Athens, GA. 3 | 0622 | | |
| Citizenship: | NETHERLANDS | | | | |
| STATE OF | - |) | | | |
| STATE OF | *************************************** |) ss. | | | |
| COUNTY OF _ | | _) | | | |
| | | | | | |
| On this | day of | 2012, before me per | rsonally appeared | MARGARE | <u>THA WOLFERT</u> , to me |
| | person described in and | who executed the for | egoing instrumen | r, and ne/sne | executed the same for |
| the uses and pur | poses therein set forth. | | | | |
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| Notary Public | | | | | |

Assignment Serial No. 13/182,683 Filed: July 14, 2011

CYCLOPROPENONES AND THE PHOTOCHEMICAL GENERATION OF CYCLIC ALKYNES THEREFROM

Date

Name

SARA V. ORSKI

Address:

10518 Apple Ridge Road, Gaithersburg, MD 20886

) ss.

Citizenship:

STATE OF Male

_ day of to Caue 2012, before me personally appeared SARA V. ORSKI, to me known to be the person described in and who excented the foregoing instrument, and he/she executed the same for the uses and purposes therein set forth.

Notary Public

IVETTE WILLIAMS NOTARY PUBLIC MONTGOMERY COUNTY MARYLAND MY COMMISSION EXPIRES JAN. 17, 2015

PATENT

REEL: 028163 FRAME: 0224

RECORDED: 05/07/2012