| Form PTO-1595 (Rev. 07/05) OMB No. 0651-0027 (exp. 6/30/2008) | บ.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office | | |
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| RECORDATION FO | RM COVER SHEET | | |
| PATENT | S ONLY | | |
| To the Director of the U.S. Patent and Trademark Office: Pleas | se record the attached documents or the new address(es) below. | | |
| 1. Name of conveying party(ies) | 2. Name and address of receiving party(les) | | |
| S. M. Kolodgle M. J. Lavery M. W. Lim N. E. McCready X. Melendez A. R. Noble R. M. Ragsdale M. Serbinski | Name: United States of America, Represented by Sec. of Navy | | |
| W. H. Thomas II B. T. McLintock | Internal Address: Chief of Naval Research | | |
| Additional name(s) of conveying party(ies) attached? Yes 🗹 No | Office of Counsel, Code 00CCIP | | |
| 3. Nature of conveyance/Execution Date(s): | Street Address: 1 Liberty Center | | |
| Execution Date(s) Oct31 Nov1,7,20,21,22,30 Dec1 Jan23 | 875 N. Randolph Street | | |
| Assignment Merger | 0,011 | | |
| Security Agreement Change of Name | City: Arlington | | |
| Joint Research Agreement | State: VA | | |
| Government Interest Assignment | Country: US Zip: 22203-1995 | | |
| Executive Order 9424, Confirmatory License | Country: US Zip: 22203-1995 | | |
| Other (exc yrs Oct, Nov, Dec: 2011, Jan: 2012) | Additional name(s) & address(es) attached? Yes Vo | | |
| 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) | | | |
| 13/374,183 (Docket Navy Case 100616) | , | | |
| | | | |
| Additional numbers at | tached? Yes No | | |
| 5. Name and address to whom correspondence concerning document should be mailed: | 6. Total number of applications and patents involved: 1 | | |
| Name: Gerhard W. Thielman | | | |
| | 7. Total fee (37 CFR 1.21(h) & 3.41) \$_40.00 | | |
| Internal Address: Office of Counsel, Code C74 Naval Surface Warfare Center Dahlgren Division | Authorized to be charged by credit card | | |
| | ✓ Authorized to be charged to deposit account | | |
| Street Address: 17632 Dahlgren Road | Enclosed None required (government interest not affecting title) | | |
| Suite 158 | | | |
| City: Dahlgren | 8. Payment Information | | |
| State: VA Zip:22448-5110 | a. Credit Card Last 4 Numbers Expiration Date | | |
| Phone Number: (540)653-8061 | b. Deposit Account Number 50-0967 | | |
| Fax Number: (540)653-8879 | Authorized User Name Gerhard W. Thielman | | |
| Email Address: gerhard.thlelman@nav.mil | <u> </u> | | |
| 9. Signature: | | | |
| Signature | Date | | |
| Gerhard W. Thielman, Reg. 43,186 Name of Person Signing | Total number of pages including cover sheet, attachments, and documents: | | |

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

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PAGE 02/10 PAGE 02/06

ASSIGNMENT OF INVENTION

Navy Case No. 100616

WHEREAS, we, Shawn M. Kolodgic of 1015 Prince Edward Street, Fredericksburg, VA 22401; Michael J. Levery of 18 South Pointe Laue, Fredericksburg, VA 22405; Michael W. Lim of 3612 Carolina Court, Fredericksburg, VA 22408; Nicholas E. McCready of 305 6th Street, Colonial Beach, VA 22443; Xavier Mclendez of 700 Green Tree Road Apt. 202, Fredericksburg, VA 22406; Ashley R. Noble of 9839 Gordon Road, Spotsylvania, VA 22553; Ryan M. Ragsdale of 7462 Cleveland Drive, King George, VA 22485; Matthew Serbinski of 289 Cedar Ridge Drive, Ruther Glen, VA 22546; William Howard Thomas II of 14354 Round Hill Road, King George, VA 22485 and B. Thomas McLintock of P.O. Box 1032, West Jefferson, NC 28694, while employed by the Government of the United States of America, heroinafter referred to as the Government, have made an invention entitled "COOPERATIVE CONTROL COMMUNICATION BETWEEN VEHICLES" identified as Navy Case No. 100616 and described in application for Letters Patent of the United States of America executed by us on 31 October 20

WHEREAS, the conditions under which the invention was made are such as to entitle the Government under Paragraph 1(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights; and

WHEREAS, the Government is desirous of obtaining the entire right, title and interest in and to the invention disclosed in said application within the United States of America, its territories and possessions and other rights and benefits herein granted; and

WHEREAS, as to foreign rights, the Government desires an option to obtain such rights;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign and transfer to the United States of America as represented by the Secretary of the Navy the entire right, title, and interest in and to said invention within the United States of America, its territories and possessions, and the entire right, title and interest in and to said application and any continuation, division or substitution thereof, and such Letters Patent as may issue therefrom and any reissue or extensions thereof, said invention, application and Letters Patent to be held by the United States of America as represented by the Secretary of the Navy to the end of the term for which said Letters Potent may be granted, as fully and entirely as the same would have been held by us had this assignment not been

We do hereby also grant unto the Government, the option to take the entire right, title and interest in and to the invention and all patent applications, patents and other forms of protection thereon in countries foreign to the United States of America within eight months of the filing date of any application for United States Letters Patent covering the invention; such option to be exercised by a written notification to us within such eight months identifying the specific foreign countries in which the Government will file or cause to be filed an application for potent or other form of protection on the invention; and that the rights in the foreign countries not exercised under the option are left to us subject to a nonexclusive, irravocable, royalty-free license to the Government in any patent or other form of protection which may issue on the invention in any foreign country, including the power to issue sub-licenses for use on behalf of the Covernment and/or in furtherance of the foreign policies of the Government,

We hereby further agree to make, execute, and deliver to the Government, any and all papers, documents, affidavits, statements, or other instruments that may be necessary in the prosecution of the application and of any continuation, division or substitution of the application, or any application for reissue or extension of said Letters Patent, and to assist the Government in every way in protecting the invention as may be requested, provided that any expense arising through such efforts will be paid by the Government.

IN TESTIMONY WHEREOF, we have set our hands and affixed our seals. Scal Shawn M. Kolodgie Date Michael J. Lavory Senl Scal Michael W. Lim Date Date Nicholas E. McCready Seal Scal Date Xavier Melendez Date Ashley R. Noble Scal Date Ryan M. Ragsdale Date Matthew Serbinski Scal Scal Date William Howard Thomas II Date Brian Thomas McLintock

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ASSIGNMENT OF INVENTION

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Navy Case No. 100616

WHEREAS, we, Shawn M. Kolodgie of 1015 Prince Edward Street, Fredericksburg, VA 22401; Michael J. Lavery of 18 South Pointe Lane, Fredericksburg, VA 22405; Michael W. Lim of 3612 Carolina Court, Fredericksburg, VA 22408; Nicholas E. McCready of 305 6th Street, Colonial Beach, VA 22443; Xavier Melendez of 700 Green Tree Road Apt. 202, Fredericksburg, VA 22406; Ashley R. Noble of 9839 Gordon Road, Spotsylvania, VA 22553; Ryan M. Ragadale of 7462 Cleveland Drive, King George, VA 22485; Matthew Serbinski of 289 Cedar Ridge Drive, Ruther Glen, VA 22546; William Howard Thomas II of 14354 Round Hill Road, King George, VA 22485 and B. Thomas McLintock of P.O. Bex 1032, West Jefferson, NC 28694, while employed by the Government of the United States of America, hereinafter referred to as the Government, have made an invention entitled "COOPERATIVE CONTROL COMMUNICATION BETWEEN VEHICLES" identified as Navy Case No. 100616 and described in application for Letters Patent of the United States of America executed by us on 23 January 2012, and

WHEREAS, the conditions under which the invention was made are such as to entitle the Government under Paragraph 1(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights; and

WHEREAS, the Government is desirous of obtaining the entire right, title and interest in and to the invention disclosed in said application within the United States of America, its territories and possessions and other rights and benefits herein granted; and

WHEREAS, as to foreign rights, the Government desires an option to obtain such rights;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign and transfer to the United States of America as represented by the Secretary of the Navy the entire right, title, and interest in and to said invention within the United States of America, its territories and possessions, and the entire right, title and interest in and to said application and any continuation, division or substitution thereof, and such Letters Patent as may issue therefrom and any reissue or extensions thereof, said invention, application and Letters Patent to be held by the United States of America as represented by the Secretary of the Navy to the end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by us had this assignment not been

We do hereby also grant unto the Government, the option to take the entire right, title and interest in and to the invention and all patent applications, patents and other forms of protection thereon in countries foreign to the United States of America within eight months of the filing date of any application for United States Letters Patent govering the invention; such option to be exercised by a written notification to us within such eight months identifying the specific foreign countries in which the Government will file or cause to be filed an application for patent or other form of protection on the invention; and that the rights in the foreign countries not exercised under the option are left to us subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent or other form of protection which may issue on the invention in any foreign country, including the power to issue sub-licenses for use on behalf of the Government and/or in furtherance of the foreign policies of the Government.

We hereby further agree to make, execute, and deliver to the Government, any and all papers, documents, affidavits, statements, or other instruments that may be necessary in the prosecution of the application and of any continuation, division or substitution of the application, or any application for reissue or extension of said Letters Patent, and to assist the Government in every way in protecting the invention as may be requested, provided that any expense arising through such efforts will be paid by the Government.

IN TESTIMONY WHEREOF, we have set our hands and affixed our scale.

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PAGE 04/10 PAGE 02/04

ASSIGNMENT OF INVENTION

Navy Case No. 100616

WHEREAS, we, Shawn M. Kolodgie of 1015 Prince Edward Street, Fredericksburg, VA 22401; Michael J. Lavery of 18 South Pointe Lane, Fredericksburg, VA 22405; Michael W. Lim of 3612 Carolina Court, Fredericksburg, VA 22408; Nicholas E. McCready of 305 6th Street, Colonial Beach, VA 22443; Xavier Mclandez of 700 Green Tree Road Apr., 202, Fredericksburg, VA 22406; Ashley R. Noble of 9839 Gordon Road, Spotsylvania, VA 22553; Ryan M. Ragsdale of 7462 Cleveland Drive, King George, VA 22485; Mauhew Serbinski of 289 Cedar Ridge Drive, Ruther Glen, VA 22546; William Howard Thomas II of 14354 Round Hill Road, King George, VA 22485 and B. Thomas McLintock of P.O. Box 1032, West Jefferson, NC 28694, while employed by the Government of the United States of America, hereinafter referred to as the Government, have made an invention entitled "COOPERATIVE CONTROL COMMUNICATION BETWEEN VEHICLES" identified as Navy Case No. 100616 and described in application for Letters Patent of the United States of America executed by us on 21 November 2011, and

WHEREAS, the conditions under which the invention was made are such as to entitle the Government under Paragraph 1(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights; and

WHEREAS, the Government is desirous of obtaining the entire right, title and interest in and to the invention disclosed in said application within the United States of America, its territories and possessions and other rights and benefits herein granted; and

WHEREAS, as to foreign rights, the Government desires an option to obtain such rights;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign and transfer to the United States of America as represented by the Secretary of the Navy the entire right, title, and interest in and to said invention within the United States of America, its territories and possessions, and the entire right, title and interest in and to said application and any continuation, division or substitution thereof, and such Letters Patent as may issue therefrom and any reissue or extensions thereof, said invention, application and Letters Patent to be held by the United States of America as represented by the Secretary of the Navy to the end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by us had this assignment not been mado.

We do hereby also grant unto the Government, the option to take the entire right, title and interest in and to the invention and all patent applications, patents and other forms of protection thereon in countries foreign to the United States of I America within eight months of the filing date of any application for United States Letters Patent covering the invention; such option to be exercised by a written notification to us within such eight months identifying the specific foreign countries in which the Government will file or cause to be filed an application for patent or other form of protection on the invention; and that the rights in the foreign countries not exercised under the option are left to us subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent or other form of protection which may issue on the invention in any foreign country, including the power to issue sub-licenses for use on hebalf of the Covernment and/or in furtherance of the foreign policies of the Government.

We hereby further agree to make, execute, and deliver to the Government, any and all papers, documents, affidavits, statements, or other instruments that may be necessary in the prosecution of the application and of any continuation, division or substitution of the application, or any application for reissue or extension of said Letters Patent, and to assist the Government in every way in protecting the invention as may be requested, provided that any expense arising through such efforts will be paid by the Government.

IN TESTIMONY WHEREOF, we have set our hands and affixed our seals.

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| Date | William Howard Thomas II | Date | Brian Thomas McLinton | olc |

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ASSIGNMENT OF INVENTION

Navy Case No. 100616

WHEREAS, we, Shawn M. Kolodgie of 1015 Prince Edward Street, Fredericksburg, VA 22401; Michael J. Lavery of 18 South Pointe Lane, Fredericksburg, VA 22405; Michael W. Lim of 3612 Carolina Court, Fredericksburg, VA 22408; Nicholas E. McCready of 305 6th Street, Colonial Beach, VA 22443; Xavier Melendez of 700 Green Tree Road Apt. 202, Fredericksburg, VA 22406; Ashley R. Noble of 9839 Gordon Road, Spotsylvania, VA 22553; Ryan M. Ragsdale of 7462 Cleveland Drive, King George, VA 22485; Matthew Serbinski of 289 Cedar Ridge Drive, Ruther Glen, VA 22546; William Howard Thomas II of 14354 Round Hill Road, King George, VA 22485 and B. Thomas McLintock of P.O. Box 1032, West Jefferson, NC 28694, while employed by the Government of the United States of America, hereinafter referred to as the Government, have made an invention entitled "COOPERATIVE CONTROL COMMUNICATION BETWEEN VEHICLES" identified as Navy Case No. 100616 and described in application for Letters Patent of the United States of America executed by us on 29 November 2011, and

WHEREAS, the conditions under which the invention was made are such as to entitle the Government under Pamgraph 1(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights; and

WHEREAS, the Government is desirous of obtaining the entire right, title and interest in and to the invention disclosed in said application within the United States of America, its territories and possessions and other rights and benefits herein granted; and

WHEREAS, as to foreign rights, the Government desires an option to obtain such rights;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign and transfer to the United States of America as represented by the Secretary of the Navy the entire right, title, and interest in and to said invention within the United States of America, its territories and possessions, and the entire right, title and interest in and to said application and any continuation, division or substitution thereof, and such Letters Patent as may issue therefrom and any reissue or extensions thereof, said invention, application and Letters Patent to be held by the United States of America as represented by the Secretary of the Navy to the end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by us had this assignment not been made.

We do hereby also grant unto the Government, the option to take the entire right, title and interest in and to the invention and all patent applications, patents and other forms of protection thereon in countries foreign to the United States of America within eight months of the filling date of any application for United States Letters Patent covering the invention; such option to be exercised by a written notification to us within such eight months identifying the specific foreign countries in which the Government will file or cause to be filed an application for patent or other form of protection on the invention; and that the rights in the foreign countries not exercised under the option are left to us subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent or other form of protection which may issue on the invention in any foreign country, including the power to issue sub-licenses for use on behalf of the Government and/or in furtherance of the foreign policies of the Government.

We hereby further agree to make, execute, and deliver to the Government, any and all papers, documents, affidavits, statements, or other instruments that may be necessary in the prosecution of the application and of any continuation, division or substitution of the application, or any application for reissue or extension of said Letters Patent, and to assist the Government in every way in protecting the invention as may be requested, provided that any expense arising through such efforts will be paid by the Government.

IN TESTIMONY WHEREOF, we have set our hands and affixed our seals.

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PAGE 06/10

PAGE 02/04

ASSIGNMENT OF INVENTION

Navy Case No. 100616

WHEREAS, we, Shawn M. Kolodgie of 1015 Prince Edward Street, Fredericksburg, VA 22401; Michael J. Lavery of 18 South Pointe Lane, Fredericksburg, VA 22405; Michael W. Lim of 3612 Carolina Court, Fredericksburg, VA 22408; Nicholas E. McCready of 305 6th Street, Colonial Beach, VA 22443; Xavier Melendez of 700 Green Tree Road Apt. 202, Fredericksburg, VA 22406; Ashley R. Noble of 9839 Gordon Road, Spotsylvania, VA 22553; Ryan M. Ragsdale of 7462 Cleveland Drive, King George, VA 22485; Matthew Serbinski of 289 Cedar Ridge Drive, Ruther Glen, VA 22546; William Howard Thomas II of 14354 Round Hill Road, King George, VA 22485 and E. Thomas McLintock of P.O. Box 1032, West Jefferson, NC 28694, while employed by the Government of the United States of America, hereinafter referred to as the Government, have made an invention entitled "COOPERATIVE CONTROL COMMUNICATION BETWEEN VEHICLES" identified as Navy Case No. 100616 and described in application for Letters Patent of the United States of America executed by us on 30 November 2011, and

WHEREAS, the conditions under which the invention was made are such as to entitle the Government under Paragraph 1(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights; and

WHEREAS, the Government is desirous of obtaining the entire right, title and interest in and to the invention disclosed in said application within the United States of America, its territories and possessions and other rights and benefits herein granted; and

WHEREAS, as to foreign rights, the Government desires an option to obtain such rights;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign and transfer to the United States of America as represented by the Secretary of the Navy the entire right, title, and interest in and to said invention within the United States of America, its territories and possessions, and the entire right, title and interest in and to said application and any continuation, division or substitution thereof, and such Letters Patent as may issue therefrom and any reissue or extensions thereof, said invention, application and Letters Patent to be held by the United States of America as represented by the Secretary of the Navy to the end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been hold by us had this assignment not been

We do hereby also grant unto the Government, the option to take the entire right, title and interest in and to the invention and all patent applications, patents and other forms of protection thereon in countries foreign to the United States of America within eight months of the filing date of any application for United States Letters Fatent covering the invention; such option to be exercised by a written notification to us within such eight months identifying the specific foreign countries in which the Government will file or cause to be filed an application for patent or other form of protection on the invention; and that the rights in the foreign countries not exercised under the option are left to us subject to a nonexplusive, intevocable, royalty-free license to the Government in any patent or other form of protection which may issue on the invention in any foreign country, including the power to issue sub-licenses for use on behalf of the Government and/or in furtherance of the foreign policies of the Government.

We hereby further agree to make, execute, and deliver to the Government, any and all papers, documents, affidavits, statements, or other instruments that may be necessary in the prosecution of the application and of any continuation, division or substitution of the application, or any application for reissue or extension of said Letters Fatent, and to assist the Government in every way in protecting the invention as may be requested, provided that any expense arising through such efforts will be paid by the Government.

IN TESTIMONY WHEREOF, we have set our hands and affixed our scals.

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| Date | Michael W. Lim | Date | Nicholas E. McCready | |
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PAGE 07/10 PAGE 03/00

Navy Case No. 100616

ASSIGNMENT OF INVENTION

WHEREAS, we, Shawn M. Kolodgic of 1015 Prince Edward Street, Fredericksburg, VA 22401; Michael J. Lavery of 18 South Pointe Lane, Fredericksburg, VA 22405; Michael W. Lim of 3612 Carolina Court, Fredericksburg, VA 22408; Nicholas E. McCready of 305 6th Street, Colonial Beach, VA 22443; Xavier Melendez of 700 Green Tree Road Apt. 202, Fredericksburg, VA 22406; Ashley R. Noble of 9839 Gordon Road, Spotsylvania, VA 22553; Ryan M. Ragsdale of 7462 Cleveland Drive, King George, VA 22485; Matthew Serbinski of 289 Cedar Ridge Drive, Ruther Glen, VA 22546; William Howard Thomas II of 14354 Round Hill Road, King Goorge, VA 22485 and B. Thomas McLintock of P.O. Box 1032, West Jefferson, NC 28694, winte employed by the Government of the United States of America, hereinafter referred to as the Government, have made an invention entitled "COOPERATIVE CONTROL COMMUNICATION BETWEEN VEHICLES" identified as Navy Case No. 100616 and described in application for Letters Patent of the United States of America executed by us on 1 December 2011

WHEREAS, the conditions under which the invention was made are such as to entitle the Government under Paragraph 1(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights; and

WHEREAS, the Government is destrous of obtaining the entire right, title and interest in and to the invention disclosed in said application within the United States of America, its territories and possessions and other rights and henefits herein granted; and

WHEREAS, as to foreign rights, the Government desires an option to obtain such rights;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign and transfer to the United States of America as represented by the Sacretary of the Navy the entire right, title, and interest in and to said invention within the United States of America, its territories and possessions, and the entire right, title and interest in and to said application and any continuation, division or substitution thereof, and such Letters Patent as may issue therefrom and any release or extensions thereof, said invention, application and Letters Patent to be held by the United States of America as represented by the Secretary of the Navy to the end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by us had this assignment not been made.

We do hereby also grant unto the Government, the option to take the entire right, title and interest in and to the invention and all patent applications, patents and other forms of protection thereon in countries foreign to the United States of America within eight months of the filing date of any application for United States Letters Patent covering the invention; such option to be exercised by a written notification to us within such eight months identifying the specific foreign countries in which the Government will file or cause to be filed an application for patent or other form of protection on the invention; and that the rights in the foreign countries not exercised under the option are left to us subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent or other form of protection which may issue on the invention in any foreign country, including the power to issue sub-licenses for use on behalf of the Government and/or in furtherunce of the foreign policies of the Government,

We hereby further agree to make, execute, and deliver to the Government, any and all papers, documents, affidavits, statements, or other instruments that may be necessary in the prosecution of the application and of any continuation, division or substitution of the application, or any application for reissue or extension of said Letters Patent, and to assist the Government in every way in protecting the invention as may be requested, provided that any expense arising through such efforts will be paid by the Government.

IN TESTIMONY WHEREOF, we have set our hands and affixed our seals.

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ASSIGNMENT OF INVENTION

Navy Case No. 100616

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WHEREAS, we, Shawn M. Kolodgie of 1015 Prince Edward Street, Fredericksburg, VA 22401; Michael J. Lavery of 18 South Pointe Lane, Fredericksburg, VA 22405; Michael W. Lim of 3612 Carolina Court, Fredericksburg, VA 22408; Nicholas E. McCready of 305 6th Street, Colonial Beach, VA 22443; Xavier Melendez of 700 Green Tree Road Apt. 202, Fredericksburg, VA 22406; Ashley R. Noble of 9839 Gordon Road, Spotsylvania, VA 22553; Ryan M. Ragsdale of 7462 Cleveland Drive, King George, VA 22485; Matthew Serbinski of 289 Cedar Ridge Drive, Ruther Glen, VA 22546; William Howard Thomas II of 14354 Round Hill Road, King George, VA 22485 and B. Thomas McLintock of P.O. Box 1032, West Jefferson, NC 28694, while employed by the Government of the United States of America, hereinafter referred to as the Government, have made an invention entitled "COOPERATIVE CONTROL COMMUNICATION BETWEEN VEHICLES" identified as Navy Case No. 100616 and described in application for Letters Patent of the United States of America executed by us on N_{KV} .

WHEREAS, the conditions under which the invention was made are such as to entitle the Government under Paragraph I(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights; and

WHEREAS, the Government is desirous of obtaining the entire right, title and interest in and to the invention disclosed in said application within the United States of America, its territories and possessions and other rights and benefits herein granted; and

WHEREAS, as to foreign rights, the Government desires an option to obtain such rights;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign and transfer to the United States of America as represented by the Secretary of the Navy the entire right, title, and interest in and to said invention within the United States of America, its territories and possessions, and the entire right, title and interest in and to said application and any continuation, division or substitution thereof, and such Letters Patent as may issue therefrom and any reissue or extensions thereof, said invention, application and Letters Patent to be held by the United States of America as represented by the Secretary of the Navy to the end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by us had this assignment not been made.

We do hereby also grant unto the Government, the option to take the entire right, title and interest in and to the invention and all patent applications, patents and other forms of protection thereon in countries foreign to the United States of America within eight months of the filing date of any application for United States Letters Patent covering the invention; such option to be exercised by a written notification to us within such eight months identifying the specific foreign countries in which the Government will file or cause to be filed an application for patent or other form of protection on the invention; and that the rights in the foreign countries not exercised under the option are left to us subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent or other form of protection which may issue on the invention in any foreign country, including the power to issue sub-licenses for use on behalf of the Government and/or in furtherance of the foreign policies of the Government.

We hereby further agree to make, execute, and deliver to the Government, any and all papers, documents, affidavits, statements, or other instruments that may be necessary in the prosecution of the application and of any continuation, division or substitution of the application, or any application for reissue or extension of said Letters Patent, and to assist the Government in every way in protecting the invention as may be requested, provided that any expense arising through such efforts will be paid by the Government.

IN TESTIMONY WHEREOF, we have set our hands and affixed our scals.

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| Date | William Howard Thomas II | Date | Brian Thomas McLinto | ck |

PATENT

REEL: 027580 FRAME: 0557

ASSIGNMENT OF INVENTION

WHEREAS, we, Shawn M. Kolodgic of 1015 Prince Edward Street, Fredericksburg, VA 22401; Michael J. Lavery of 18 South Pointe Lane, Fredericksburg, VA 22405; Michael W. Lim of 3612 Carolina Court, Fredericksburg, VA 22408; Nicholas E. McCready of 305 6th Street, Colonial Beach, VA 22443; Xavier Melendez of 700 Green Tree Road Apt. 202, Fredericksburg, VA 22406; Ashley R. Noble of 9839 Gordon Road, Spotsylvania, VA 22553; Ryan M. Ragsdale of 7462 Cleveland Drive, King George, VA 22485; Matthew Serbinski of 289 Cedar Ridge Drive, Ruther Glen, VA 22546; William Howard Thomas II of 14354 Round Hill Road, King George, VA 22485 and B. Thomas McLintock of P.O. Box 1032, West Jefferson, NC 28694, while employed by the Government of the United States of America, hereinafter referred to as the Government, have made an invention entitled "COOPERATIVE CONTROL COMMUNICATION BETWEEN VEHICLES" identified as Navy Case No. 100616 and described in application for Letters Patent of the United States of America executed by us on 22 November 2011, and

WHEREAS, the conditions under which the invention was made are such as to entitle the Government under Paragraph 1(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights; and

WHEREAS, the Government is desirous of obtaining the entire right, title and interest in and to the invention disclosed in said application within the United States of America, its territories and possessions and other rights and benefits herein granted; and

WHEREAS, as to foreign rights, the Government desires an option to obtain such rights;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign and transfer to the United States of America as represented by the Secretary of the Navy the entire right, title, and interest in and to said invention within the United States of America, its territories and possessions, and the entire right, title and interest in and to said application and any continuation, division or substitution thereof, and such Letters Patent as may issue therefrom and any reissue or extensions thereof, said invention, application and Letters Patent to be held by the United States of America as represented by the Secretary of the Navy to the end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by us had this assignment not been made.

We do hereby also grant unto the Government, the option to take the entire right, title and interest in and to the invention and all patent applications, patents and other forms of protection thereon in countries foreign to the United States of America within eight months of the filing date of any application for United States Letters Patent covering the invention; such option to be exercised by a written notification to us within such eight months identifying the specific foreign countries in which the Government will file or cause to be filed an application for patent or other form of protection on the invention; and that the rights in the foreign countries not exercised under the option are left to us subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent or other form of protection which may issue on the invention in any foreign country, including the power to issue sub-licenses for use on behalf of the Government and/or in furtherance of the foreign policies of the Government.

We hereby further agree to make, execute, and deliver to the Government, any and all papers, documents, affidavits, statements, or other instruments that may be necessary in the prosecution of the application and of any continuation, division or substitution of the application, or any application for reissue or extension of said Letters Patent, and to assist the Government in every way in protecting the invention as may be requested, provided that any expense arising through such efforts will be paid by the Government.

IN TESTIMONY WHEREOF, we have set our hands and affixed our seals.

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| Date | William Howard Thomas II | Date | Brian Thomas McLintock | k |

PATENT REEL: 027580 FRAME: 0558

Navy Case No. 100616

ASSIGNMENT OF INVENTION

Navy Case No. 100616

WHEREAS, we, Shawn M. Kolodgic of 1015 Prince Edward Street, Fredericksburg, VA 22401; Michael J. Lavery of 18 South Pointe Lane, Fredericksburg, VA 22405; Michael W. Lim of 3612 Carolina Court, Fredericksburg, VA 22408; Nicholas E. McCready of 305 6th Street, Colonial Beach, VA 22443; Xavier Melendez of 700 Green Tree Road Apt. 202, Fredericksburg, VA 22406; Ashley R. Noble of 9839 Gordon Road, Spotsylvania, VA 22553; Ryan M. Ragsdale of 7462 Cleveland Drive, King George, VA 22485; Matthew Scrbinski of 289 Cedar Ridge Drive, Ruther Glen, VA 22546; William Howard Thomas II of 14354 Round Hill Road, King George, VA 22485 and B. Thomas McLintock of P.O. Box 1032, West Jefferson, NC 28694, while employed by the Government of the United States of America, hereinafter referred to as the Government, have made an invention entitled "COOPERATIVE CONTROL COMMUNICATION BETWEEN VEHICLES" identified as Navy Case No. 100616 and described in application for Letters Patent of the United States of America executed by us on ______November 2011_____, and

WHEREAS, the conditions under which the invention was made are such as to entitle the Government under Paragraph 1(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights; and

WHEREAS, the Government is desirous of obtaining the entire right, title and interest in and to the invention disclosed in said application within the United States of America, its territories and possessions and other rights and benefits herein granted; and

WHEREAS, as to foreign rights, the Government desires an option to obtain such rights;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign and transfer to the United States of America as represented by the Secretary of the Navy the entire right, title, and interest in and to said invention within the United States of America, its territories and possessions, and the entire right, title and interest in and to said application and any continuation, division or substitution thereof, and such Letters Patent as may issue therefrom and any reissue or extensions thereof, said invention, application and Letters Patent to be held by the United States of America as represented by the Secretary of the Navy to the end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been hold by us had this assignment not been made.

We do hereby also grant unto the Government, the option to take the entire right, title and interest in and to the invention and all patent applications, patents and other forms of protection thereon in countries foreign to the United States of America within eight months of the filing date of any application for United States Letters Patent covering the invention; such option to be exercised by a written notification to us within such eight months identifying the specific foreign countries in which the Government will file or cause to be filed an application for patent or other form of protection on the invention; and that the rights in the foreign countries not exercised under the option are left to us subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent or other form of protection which may issue on the invention in any foreign country, including the power to issue sub-licenses for use on behalf of the Government and/or in furtherance of the foreign policies of the Government.

We hereby further agree to make, execute, and deliver to the Government, any and all papers, documents, affidavits, statements, or other instruments that may be necessary in the prosecution of the application and of any continuation, division or substitution of the application, or any application for reissue or extension of said Letters Patent, and to assist the Government in every way in protecting the invention as may be requested, provided that any expense arising through such efforts will be paid by the Government.

IN TESTIMONY WHEREOF, we have set our hands and affixed our seals.

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| Date | William Howard Thomas II | Date | Brian Thomas McLintock |

Brian Thomas McLintock

PATENT REEL: 027580 FRAME: 0559

RECORDED: 01/24/2012