

# PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT												
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT												
<b>CONVEYING PARTY DATA</b>													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Curtis Havran</td> <td>05/11/2010</td> </tr> <tr> <td>Jackie Wayne Spears</td> <td>05/11/2010</td> </tr> <tr> <td>Karina Ogilvie</td> <td>05/11/2010</td> </tr> <tr> <td>Robert John Keller</td> <td>05/11/2010</td> </tr> <tr> <td>David Phillips</td> <td>07/23/2010</td> </tr> </tbody> </table>		Name	Execution Date	Curtis Havran	05/11/2010	Jackie Wayne Spears	05/11/2010	Karina Ogilvie	05/11/2010	Robert John Keller	05/11/2010	David Phillips	07/23/2010
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Name:</b></td> <td>Orbital Sciences Corporation</td> </tr> <tr> <td><b>Street Address:</b></td> <td>21839 Atlantic Boulevard</td> </tr> <tr> <td><b>City:</b></td> <td>Dulles</td> </tr> <tr> <td><b>State/Country:</b></td> <td>VIRGINIA</td> </tr> <tr> <td><b>Postal Code:</b></td> <td>20166</td> </tr> </table>		<b>Name:</b>	Orbital Sciences Corporation	<b>Street Address:</b>	21839 Atlantic Boulevard	<b>City:</b>	Dulles	<b>State/Country:</b>	VIRGINIA	<b>Postal Code:</b>	20166		
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<b>CORRESPONDENCE DATA</b>													
<p>Fax Number: (617)235-9492</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 2125969000</p> <p>Email: joy.chapman@ropesgray.com</p> <p>Correspondent Name: Ropes &amp; Gray LLP</p> <p>Address Line 1: 1211 Ave. of the Americas</p> <p>Address Line 2: Docketing Dept.</p> <p>Address Line 4: New York, NEW YORK 10036</p>													
<b>ATTORNEY DOCKET NUMBER:</b>	OSIA-402-101												
<b>NAME OF SUBMITTER:</b>	Joy Chapman												

CH \$40.00 12778046

**501242130**

**PATENT**  
**REEL: 024734 FRAME: 0376**

**Total Attachments: 8**

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## ASSIGNMENT

WHEREAS, we, **Curtis Havran, Jackie Wayne Spears, Karina Ogilvie, Robert John Keller and David Phillips**, have invented a certain improvement in **ELECTRONIC SAFE/ARM SYSTEM AND METHODS OF USE THEREOF** described in an application for Letters Patent of the United States, the specification of which:

- ☐ is being executed on even date herewith; and is about to be filed in the United States Patent Office;
- ☒ was filed on May 11, 2010 as Application No. 12/778,046;
- ☐ was patented under U.S. Patent No. \_\_\_\_\_ on \_\_\_\_\_.

WHEREAS, **Orbital Sciences Corporation**, (hereinafter "ASSIGNEE"), having principal offices at **21839 Atlantic Boulevard, Dulles, Virginia 20166** desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon, and any reissue, continuation, divisional and foreign counterparts thereof and including the right to claim priority under any applicable statute, treaty or convention based on said application; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full 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 hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, all choses in action pertaining to the applications or Letters Patent including the right to sue for and collect damages and other recoveries for past infringement thereof, all rights to initiate proceedings before government and administrative bodies, and all files, records and other materials arising from the prosecution, exploitation, or defense of rights and registrations pertaining to the applications or Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

The undersigned hereby authorizes Ropes & Gray LLP, of One International Place, Boston, MA 02110, to insert hereon any further identification information necessary or desirable for recordation of this document.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seal(s) the date set forth below.

Inventor's Signature: \_\_\_\_\_  
**Curtis Havran**

State of \_\_\_\_\_ )  
 County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, the undersigned notary public, personally appeared **Curtis Havran**, proved to me through satisfactory evidence of identification, which was \_\_\_\_\_, to be the person whose name is signed on the preceding or attached document in my presence.

(SEAL)

\_\_\_\_\_  
 Notary Public

My commission expires \_\_\_\_\_

Inventor's Signature: \_\_\_\_\_  
**Jackie Wayne Spears**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, the undersigned notary public, personally appeared **Jackie Wayne Spears**, proved to me through satisfactory evidence of identification, which was \_\_\_\_\_, to be the person whose name is signed on the preceding or attached document in my presence.

(SEAL) \_\_\_\_\_  
Notary Public

My commission expires \_\_\_\_\_

Inventor's Signature: \_\_\_\_\_  
**Karina Ogilvie**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, the undersigned notary public, personally appeared **Karina Ogilvie**, proved to me through satisfactory evidence of identification, which was \_\_\_\_\_, to be the person whose name is signed on the preceding or attached document in my presence.

(SEAL) \_\_\_\_\_  
Notary Public

My commission expires \_\_\_\_\_

Inventor's Signature: \_\_\_\_\_  
**Robert John Keller**

State of \_\_\_\_\_ )  
 County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, the undersigned notary public, personally appeared **Robert John Keller**, proved to me through satisfactory evidence of identification, which was \_\_\_\_\_, to be the person whose name is signed on the preceding or attached document in my presence.

(SEAL)

\_\_\_\_\_  
 Notary Public

My commission expires \_\_\_\_\_

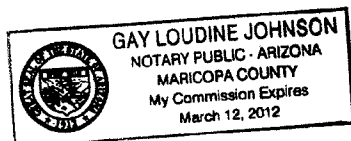
Inventor's Signature: \_\_\_\_\_

**David Phillips**

State of Arizona )  
 County of Maricopa )

On this 23<sup>rd</sup> day of July, 2010, before me, the undersigned notary public, personally appeared **David Phillips**, proved to me through satisfactory evidence of identification, which was Personally Known, to be the person whose name is signed on the preceding or attached document in my presence.

(SEAL)



\_\_\_\_\_  
 Notary Public

My commission expires March 12, 2012

## ASSIGNMENT

WHEREAS, we, **Curtis Havran, Jackie Wayne Spears, Karina Ogilvie, Robert John Keller and Dave Philips**, have invented a certain improvement in **ELECTRONIC SAFE/ARM SYSTEM AND METHODS OF USE THEREOF** described in an application for Letters Patent of the United States, the specification of which:

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NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon, and any reissue, continuation, divisional and foreign counterparts thereof and including the right to claim priority under any applicable statute, treaty or convention based on said application; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full 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 hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, all choses in action pertaining to the applications or Letters Patent including the right to sue for and collect damages and other recoveries for past infringement thereof, all rights to initiate proceedings before government and administrative bodies, and all files, records and other materials arising from the prosecution, exploitation, or defense of rights and registrations pertaining to the applications or Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

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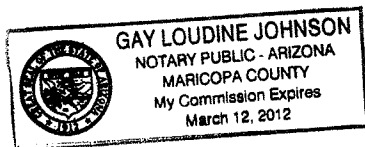
IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seal(s) the date set forth below.

Inventor's Signature:   
**Curtis Havran**

State of Arizona )  
 County of Maricopa )

On this 11 day of May, 2010, before me, the undersigned notary public, personally appeared **Curtis Havran**, proved to me through satisfactory evidence of identification, which was AZ Driver's License, to be the person whose name is signed on the preceding or attached document in my presence.

(SEAL)



  
 Notary Public

My commission expires March 12, 2012

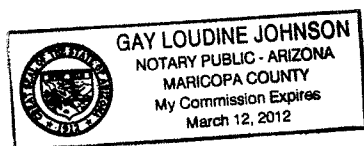


Inventor's Signature: \_\_\_\_\_

Jackie Wayne SpearsState of Arizona )  
County of Maricopa )

On this 11 day of May, 2010, before me, the undersigned notary public, personally appeared **Jackie Wayne Spears**, proved to me through satisfactory evidence of identification, which was personally known, to be the person whose name is signed on the preceding or attached document in my presence.

(SEAL)



Notary Public

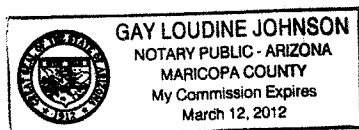
Gay Loudine JohnsonMy commission expires March 12, 2012

Inventor's Signature: \_\_\_\_\_

Karina OgilvieState of Arizona )  
County of Maricopa )

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(SEAL)



Notary Public

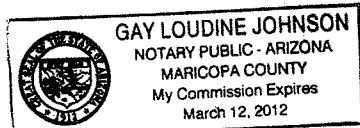
Gay Loudine JohnsonMy commission expires March 12, 2012

Inventor's Signature: Robert John Keller  
**Robert John Keller**

State of Arizona )  
 County of Maricopa )

On this 11 day of May, 2010, before me, the undersigned notary public, personally appeared **Robert John Keller**, proved to me through satisfactory evidence of identification, which was Personally Known, to be the person whose name is signed on the preceding or attached document in my presence.

(SEAL)



Gay Loudine Johnson  
 Notary Public

My commission expires March 12, 2012

Inventor's Signature: \_\_\_\_\_  
**Dave Philips**

State of \_\_\_\_\_ )  
 County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, the undersigned notary public, personally appeared **Dave Philips**, proved to me through satisfactory evidence of identification, which was \_\_\_\_\_, to be the person whose name is signed on the preceding or attached document in my presence.

(SEAL)

\_\_\_\_\_  
 Notary Public

My commission expires \_\_\_\_\_