

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT2730799

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT												
NATURE OF CONVEYANCE:	Corrective Assignment to correct the ADDRESS OF THE ASSIGNEE previously recorded on Reel 032109 Frame 0618. Assignor(s) hereby confirms the ASSIGNMENT.												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>DANIEL JOHN WHITE</td> <td>01/08/2014</td> </tr> <tr> <td>CLIVE CHARLES WOOLLEY</td> <td>01/08/2014</td> </tr> <tr> <td>JIM MAURICE ABBEY</td> <td>01/08/2014</td> </tr> <tr> <td>DAVID SIMPSON</td> <td>01/08/2014</td> </tr> <tr> <td>CHRISTOPHER MARK DRISCOLL</td> <td>01/15/2014</td> </tr> </tbody> </table>		Name	Execution Date	DANIEL JOHN WHITE	01/08/2014	CLIVE CHARLES WOOLLEY	01/08/2014	JIM MAURICE ABBEY	01/08/2014	DAVID SIMPSON	01/08/2014	CHRISTOPHER MARK DRISCOLL	01/15/2014
Name	Execution Date												
DANIEL JOHN WHITE	01/08/2014												
CLIVE CHARLES WOOLLEY	01/08/2014												
JIM MAURICE ABBEY	01/08/2014												
DAVID SIMPSON	01/08/2014												
CHRISTOPHER MARK DRISCOLL	01/15/2014												
RECEIVING PARTY DATA													
<table border="1"> <tr> <td>Name:</td> <td>QINETIQ LIMITED</td> </tr> <tr> <td>Street Address:</td> <td>CODY TECHNOLOGY PARK, IVELY ROAD</td> </tr> <tr> <td>Internal Address:</td> <td>FARNBOROUGH</td> </tr> <tr> <td>City:</td> <td>HAMPSHIRE</td> </tr> <tr> <td>State/Country:</td> <td>UNITED KINGDOM</td> </tr> <tr> <td>Postal Code:</td> <td>GU14 0LX</td> </tr> </table>		Name:	QINETIQ LIMITED	Street Address:	CODY TECHNOLOGY PARK, IVELY ROAD	Internal Address:	FARNBOROUGH	City:	HAMPSHIRE	State/Country:	UNITED KINGDOM	Postal Code:	GU14 0LX
Name:	QINETIQ LIMITED												
Street Address:	CODY TECHNOLOGY PARK, IVELY ROAD												
Internal Address:	FARNBOROUGH												
City:	HAMPSHIRE												
State/Country:	UNITED KINGDOM												
Postal Code:	GU14 0LX												
PROPERTY NUMBERS Total: 1													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>14129465</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	14129465								
Property Type	Number												
Application Number:	14129465												
CORRESPONDENCE DATA													
Fax Number:	(703)836-2787												
Phone:	703-836-6400												
Email:	email@oliff.com												
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>													
Correspondent Name:	JAMES A. OLIFF												
Address Line 1:	OLIFF, PLC.												
Address Line 2:	P.O. BOX 320850												
Address Line 4:	ALEXANDRIA, VIRGINIA 22320-4850												

ATTORNEY DOCKET NUMBER:	159982
NAME OF SUBMITTER:	SARAH CHOI
Signature:	/Sarah Choi/ for James A. Oliff
Date:	02/18/2014
<p>Total Attachments: 7</p> <p>source=2.18.14 Corrective Assignment#page1.tif</p> <p>source=2.18.14 Corrective Assignment#page2.tif</p> <p>source=2.18.14 Corrective Assignment#page3.tif</p> <p>source=2.18.14 Corrective Assignment#page4.tif</p> <p>source=2.18.14 Corrective Assignment#page5.tif</p> <p>source=2.18.14 Corrective Assignment#page6.tif</p> <p>source=2.18.14 Corrective Assignment#page7.tif</p>	

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT2708855

SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Daniel John WHITE</td><td>01/08/2014</td></tr><tr><td>Clive Charles WOOLLEY</td><td>01/08/2014</td></tr><tr><td>Jim Maurice ABBEY</td><td>01/08/2014</td></tr><tr><td>David SIMPSON</td><td>01/08/2014</td></tr><tr><td>Christopher Mark DRISCOLL</td><td>01/15/2014</td></tr></tbody></table>		Name	Execution Date	Daniel John WHITE	01/08/2014	Clive Charles WOOLLEY	01/08/2014	Jim Maurice ABBEY	01/08/2014	David SIMPSON	01/08/2014	Christopher Mark DRISCOLL	01/15/2014
Name	Execution Date												
Daniel John WHITE	01/08/2014												
Clive Charles WOOLLEY	01/08/2014												
Jim Maurice ABBEY	01/08/2014												
David SIMPSON	01/08/2014												
Christopher Mark DRISCOLL	01/15/2014												
RECEIVING PARTY DATA													
<table border="1"><tr><td>Name:</td><td>QINETIQ LIMITED</td></tr><tr><td>Street Address:</td><td>Cody Technological Park, Ively Road</td></tr><tr><td>Internal Address:</td><td>Farnborough</td></tr><tr><td>City:</td><td>Hampshire</td></tr><tr><td>State/Country:</td><td>United Kingdom</td></tr><tr><td>Postal Code:</td><td>GU14 0LX</td></tr></table>		Name:	QINETIQ LIMITED	Street Address:	Cody Technological Park, Ively Road	Internal Address:	Farnborough	City:	Hampshire	State/Country:	United Kingdom	Postal Code:	GU14 0LX
Name:	QINETIQ LIMITED												
Street Address:	Cody Technological Park, Ively Road												
Internal Address:	Farnborough												
City:	Hampshire												
State/Country:	United Kingdom												
Postal Code:	GU14 0LX												
PROPERTY NUMBERS Total: 1													
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>14129465</td></tr></tbody></table>		Property Type	Number	Application Number:	14129465								
Property Type	Number												
Application Number:	14129465												
CORRESPONDENCE DATA													
Fax Number:	(703)836-2787												
Phone:	703-836-6400												
Email:	email@oliff.com												
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>													
Correspondent Name:	JAMES A. OLIFF												
Address Line 1:	OLIFF, PLC												
Address Line 2:	P.O. BOX 320850												
Address Line 4:	ALEXANDRIA, VIRGINIA 22320-4850												
ATTORNEY DOCKET NUMBER:	159982												

**ASSIGNMENT (BEING FILED FOR DUAL PURPOSE UNDER 37 CFR 1.63(e))
For Application with Filing Date on or after September 16, 2012**

ASSIGNMENT

Insert (1-8) Legal Name(s) of Inventor(s)	(1) Daniel John WHITE (3) Jim Maurice ABBEY (5) Christopher Mark DRISCOLL (7) _____	(2) Clive Charles WOOLLEY (4) David SIMPSON (6) _____ (8) _____
---	--	--

In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to

(9) Insert Name of Assignee (10) Insert Address of Assignee	(9) QINETIQ LIMITED (10) Company No. 3796233, whose Registered Office is at Cody Technology Park, Ively Road, Farnborough, Hampshire GU14 0LX United Kingdom (hereinafter referred to as "the Assignee")
--	---

(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as

(11) Insert Identification such as Title, Case Number, or Foreign Application Number (12) Alternative Identification for filed applications	(11) CASING (QINETIQ REF:P7818/USW) (Attorney Docket No. 159982), filed on even date herewith or as (12) U.S. Application Number 14/129,465 filed 26 th December 2013
--	--

1) Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.

2) Each undersigned agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning any application or patent for the invention and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.

3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.

5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all patents resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.

6) Each undersigned hereby grants the firm of OLIFF & BERRIDGE, PLC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

(13) Declaration

As an above named inventor, I hereby declare that:


I believe I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

The application was made or authorized to be made by me.

I have reviewed and understand the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR §1.56.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

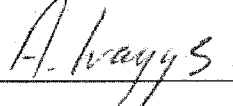
In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

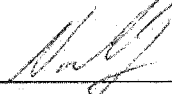
Date 8TH JANUARY 2014 Inventor Signature  (SEAL)

INVENTOR: Daniel John WHITE

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date 8th JANUARY 2014 Witness 

Date 8th January 2014 Witness 

Date 8TH JANUARY 2014. Inventor Signature  (SEAL)

INVENTOR: Clive Charles WOOLLEY

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date 8th JANUARY 2014 Witness 

Date 8TH JANUARY 2014 Witness 

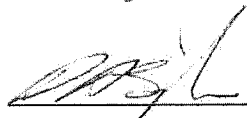
Date 8th JANUARY 2014 Inventor Signature  (SEAL)

INVENTOR: Jim Maurice ABBEY

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

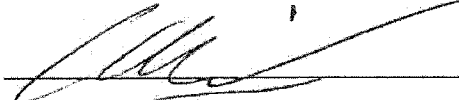
Date 8th JANUARY 2014 Witness 

Date 8th JANUARY 2014 Witness 

Date 8TH JANUARY 2014 Inventor Signature  (SEAL)

INVENTOR: David SIMPSON

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date 08TH JANUARY 2014 Witness 

Date 8th JANUARY 2014 Witness 

PATENT

REEL: 032274 FRAME: 0337

Date _____ Inventor Signature _____ (SEAL)

INVENTOR: Christopher Mark DRISCOLL

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date _____ Witness _____

Date _____ Witness _____

**ASSIGNMENT (BEING FILED FOR DUAL PURPOSE UNDER 37 CFR 1.63(e))
For Application with Filing Date on or after September 16, 2012**

ASSIGNMENT

Insert (1-8) Legal Name(s) of Inventor(s)	(1) Daniel John WHITE (3) Jim Maurice ABBEY (5) Christopher Mark DRISCOLL (7) _____	(2) Clive Charles WOOLLEY (4) David SIMPSON (6) _____ (8) _____
---	--	--

In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to

(9) Insert Name of Assignee (10) Insert Address of Assignee	(9) QINETIQ LIMITED Company No. 3796233, whose Registered Office is at Cody Technology Park, Ivaly Road, Farnborough, Hampshire GU14 0LX United Kingdom (hereinafter referred to as "the Assignee")
--	--

(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as

(11) Insert Identification such as Title, Case Number, or Foreign Application Number (12) Alternative Identification for filed applications	(11) CASING (QINETIQ REF:P7818/USW) (Attorney Docket No. 159982), filed on even date herewith or as (12) U.S. Application Number 14/129,465 filed 26 th December 2013
--	---

1) Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.

2) Each undersigned agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning any application or patent for the invention and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.

3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.

5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all patents resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.

6) Each undersigned hereby grants the firm of OLIFF & BERRIDGE, PLC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

(13) Declaration

As an above named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted

The application was made or authorized to be made by me

I have reviewed and understand the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR §1.56

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date _____ Inventor Signature _____ (SEAL)

INVENTOR: Daniel John WHITE

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date _____ Witness _____

Date _____ Witness _____

Date _____ Inventor Signature _____ (SEAL)

INVENTOR: Clive Charles WOOLLEY

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date _____ Witness _____

Date _____ Witness _____

Date _____ Inventor Signature _____ (SEAL)

INVENTOR: Jim Maurice ABBEY

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date _____ Witness _____

Date _____ Witness _____

Date _____ Inventor Signature _____ (SEAL)

INVENTOR: David SIMPSON

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date _____ Witness _____

Date _____ Witness _____

Date 15/1/14 Inventor Signature *CM Driscoll* (SEAL)

INVENTOR: Christopher Mark DRISCOLL

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date 15/1/2014 Witness *[Signature]*

Date 15/01/2014 Witness *Chris Portney*