Mail Stop: Assignment Recordation Services RECORDATION FORM COVER SHEET U.S. DEPARTMENT OF COMMERC Director of the U.S. Patent PATENTS ONLY Patent and Trademark Office P.O. Box 1450				
Alexandria, VA 22313-1450		Attorney Docket No. 149637		
Please record the attached document.				
Total number of pages including cover sheet, attachments, and document: 7				
1. A. Name of conveying parties:		2. A. Name and address of receiving party:		
 Simon Robert WIS Brian Sinclair LO Richard Middletor Additional name(s) of conveying 	WANS HICKS	QINETIQ LIMITED 85 BUCKINGHAM GATE, LONDON SW1E 6PD, UNITED KINGDOM		
	Yes No	B. Additional name(s) & address(es) attached? ☐ Yes ☑ No		
3. A. Nature of conveyance:				
Assignment	Merger			
Security Agreement	Change of Name			
☐ Other				
B. Execution Date: 11: JUL	Y 29. 2011:			
[2]: SEPTEMBER 13, 2	•			
[3]: JULY 25, 2011				
4. A. Patent Application No. 13/13	30,790	B. Patent No.(s)		
	Additional numbers attack	hed? Yes No		
C. Title of Application: METHOD OF ESTABLISHING A QUANTUM KEY FOR USE BETWEEN NETWORK NODES				
5. Name and address of party to whom		6. Total number of applications and patents involved: 1		
concerning document should be mail Name: <u>James A. Oliff</u>	ed:	7. Please charge Deposit Account No. 15-0461 the total fee (37 CFR 3.41) in the amount of \$40.00.		
Address: OLIFF & BERRIDGE, PLC P.O. Box 320850 Alexandria, VA 22320-4850 Phone Number: 703-836-6400 Fax Number: 703-836-2787		Credit any overpayment or charge any underpayment to deposit account number 15-0461.		
9. Statement and signature. To the best of my knowledge and be original document. James A. Oliff, Registration No. 27, John A. Radi, Registration No. 59,34	075	on is true and correct and any attached copy is a true copy of the Date: August 9, 2011		

PATENT REEL: 026732 FRAME: 0210

IP/P7685/USW

DEED OF ASSIGNMENT OF PATENT APPLICATION

BY AND BETWEEN

Simon Robert WISEMAN Brian Sinclair LOWANS Richard Middleton HICKS

(Inventors)

And

(Assignee)

QINETIQ LIMITED

(Address)

Company No. 3796233, whose Registered Office is at 85 Buckingham Gate, London

SW1E 6PD United Kingdom (hereinafter referred to as "the Assignee")

THIS DEED NOW WITNESSES

In accordance with their contract(s) of employment, and to the extent that it may be required to perfect the Assignee's ownership of the invention under the laws of any territory of the world, the undersigned hereby assign(s) to the Assignee the undersigned's entire right, title, and interest throughout the world – including in particular for the United States, its territories, dependencies, and possessions – in the invention identified in the Assignee's records as:

Method of establishing a quantum key for use between network nodes (Case No.

P7685/USW)

and in all applications for patents therefor and in all patents which may be granted therefor, for which the undersigned has (have) executed on even date herewith an application for a patent in the United States of America or an International application for a patent designating the United States of America, or if not on even date, then has executed on ______ or has already filed in _____ (Application Serial No. US/_____ or PCT/ GB2009/002801 filed on 02-Dec-2009)

The undersigned acknowledge(s) an obligation of assignment of this invention to the Assignee at the time the invention was made.

The undersigned agree(s) to execute all papers and documents necessary in connection with the application or any interference which may be declared and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient and further to 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.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The undersigned hereby authorize(s) and request(s) the United States Commissioner of Patents to issue any and all Letters Patent of the United States resulting from said application or any division or divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed and will not execute, any agreement in conflict herewith.

PATENT REEL: 026732 FRAME: 0211 The undersigned hereby grant(s) the firm of:

Oliff & Berridge, 277 South Washington Street, Suite 500, Alexandria, Virginia 22314 United States of America

R

the power to insert on this assignment any further identification which 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.

EXECUTED AS A DEED by the undersigned on the date(s) opposite the undersigned signature(s).

Signature of Inventor	Della	Date	29th July 2011
Witnessed by	Simon Robert WISEMAN	Date	29 JULY 2011
Signature of Inventor		Date	
Witnessed by	Brian Sinclair LOWANS	Date	
Signature of Inventor		Date .	
Witnessed by	Richard Middleton HICKS	Date	

IP/P7685/USW

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BY AND BETWEEN

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Brian Sinclair LOWANS
Richard Middleton HICKS

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Method of establishing a quantum key for use between network nodes

(Case No. **P7685/USW**)



and in all applications for pa	itents therefor and in all patents which may be granted
therefor, for which the unde	rsigned has (have) executed on even date herewith an
application for a patent in th	e United States of America or an International application
for a patent designating the	United States of America, or if not on even date, then has
executed on	or has already filed in
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EXECUTED AS A DEED by the undersigned on the date(s) opposite the undersigned signature(s).

Signature of Inventor		Date	
Witnessed by	Simon Robert WISEMAN	Date	
Signature of Inventor Witnessed by	Brian Sinclair LOWANS	Date Date	13/9/2010 13th Sep 2020
Signature of Inventor Witnessed by	Richard Middleton HICKS	Date Date	

IP/P7685/USW

DEED OF ASSIGNMENT OF PATENT APPLICATION

BY AND BETWEEN

Simon Robert WISEMAN

Brian Sinclair LOWANS Richard Middleton HICKS

(Inventors)

And

(Assignee)

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(Address)

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Method of establishing a quantum key for use between network nodes (Case No. P7685/USW)

and in all applications for patents therefor and in all patents which may be granted therefor, for which the undersigned has (have) executed on even date herewith an application for a patent in the United States of America or an International application for a patent designating the United States of America, or if not on even date, then has executed on ______ or has already filed in ______ (Application Serial No. US/_____ or PCT/ GB2009/002801 filed on 02-Dec-2009)

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PATENT REEL: 026732 FRAME: 0215 The undersigned hereby grant(s) the firm of:

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EXECUTED AS A DEED by the undersigned on the date(s) opposite the undersigned signature(s).

Signature of inventor		Date	
Witnessed by	Simon Robert WISEMAN	– Date	
		- Date	
Signature of Inventor		Date	
	Brian Sinclair LOWANS	-	
Witnessed by		Date -	
Signature of Inventor	MMKU.	Date -	28 Truly 2011
Witnessed by	Richard Middleton HICKS	Date -	25/4/11

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