

02-05-2002

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U.S. Department of Commerce  
Patent and Trademark Office



SHEET

101972139

Our Ref.: 124-892

Commissioner of Patents and Trademarks  
Box Assignment, Washington, D.C. 20231

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies): Philip S. RUSSELL Timothy A. BIRKS Jonathan C. KNIGHT Brian J. MANGAN</p> <p>Additional name/s of conveying party/ies attached? <input type="checkbox"/></p> <p>3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment      <input type="checkbox"/> Merger <input type="checkbox"/> Security Assignment      <input type="checkbox"/> Change of Name <input type="checkbox"/> Other</p> <p>Execution Date: <u>Oct. 10, 2001; Dec. 17, 18 &amp; 19, 2001</u></p>	<p>2. Name and address of receiving party(ies):</p> <p>Name: <u>QINETIQ LIMITED</u> Internal Address: _____ Street Address: <u>Cody Technology Park, Ively Road</u> _____ _____ City: <u>Farnborough, Hants</u> State/Country: <u>United Kingdom</u> Zip: <u>GU14 0LX</u></p> <p>Additional name/s &amp; address/es attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
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<p>4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: _____</p> <table border="0"><tr><td style="vertical-align: top;"><p>A. Patent Application No(s). (1) <u>09/937 715</u> (2) _____ (3) _____</p></td><td style="vertical-align: top;"><p>B. Patent No(s). (1) _____ (2) _____ (3) _____</p></td></tr></table> <p style="text-align: center;">Additional numbers attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>		<p>A. Patent Application No(s). (1) <u>09/937 715</u> (2) _____ (3) _____</p>	<p>B. Patent No(s). (1) _____ (2) _____ (3) _____</p>
<p>A. Patent Application No(s). (1) <u>09/937 715</u> (2) _____ (3) _____</p>	<p>B. Patent No(s). (1) _____ (2) _____ (3) _____</p>		

<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: <u>Stanley C. Spooner</u> Internal Address: _____ Street Address: <u>Nixon &amp; Vanderhye P.C.</u> <u>1100 North Glebe Road</u> <u>8<sup>th</sup> Floor</u> City: <u>Arlington</u> State: <u>VA</u> Zip: <u>22201</u></p>	<p>6. Total number of applications &amp; patents involved: <u>1</u></p> <p>7. Total fee (37 CFR 3.41) \$ <u>40.00</u> <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to be charged to deposit account #14-1140</p> <p>8. The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper thereafter filed in this application by this firm) to our Account No. 14-1140.</p>
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DO NOT USE THIS SPACE

<p>9. Statements and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</p>		
<p><u>Stanley C. Spooner</u> Name of Person Signing Reg. No. 27,393</p>	<p> Signature</p>	<p><u>January 16, 2002</u> Date</p>
<p>Total number of pages including <b>original</b> cover sheet, attachments, and document: [9]</p>		

09/937 715

40.00 DP

IPD/P2828/USW

## ASSIGNMENT OF PATENT APPLICATION

(Inventors) ( Philip St. John Russell  
( Timothy Adam Blrks  
( Jonathan Cave Knight  
( Brian Joseph Mangan  
(  
(  
In consideration of one pound sterling, the receipt and sufficiency of which consideration hereby acknowledged the undersigned agree(s) to assign, and hereby does assign, transfer and set over to

(Assignee) ( QINETIQ LIMITED  
(Address) (of QINETIQ LIMITED, Cody Technology Park, Ively Road, Farnborough, Hants.  
GU14 0LX, United Kingdom  
(hereinafter designated as the Assignee) the undersigned's entire right, title and interest for the United States, its territories, dependencies and possessions, and for the country of

(Other  
Countries) ( in the invention, and all application for patent and any Letters  
Patent which may be granted therefore, known as  
(Title) **A Photonic Crystal Fibre and a Method for its Production**(Case No. **P2828/USW** )  
for which the undersigned has (have) executed on even date herewith an application for patent in the United States of America or, if not on even date, then has executed (on \_\_\_\_\_ or has already filed in \_\_\_\_\_  
(U.S. appln. Serial No. 09/937,715, filed on Oct 1, 2001  
(The undersigned acknowledges an obligation of assignment of this invention to said 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 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.

The undersigned hereby grant(s) the firm of NIXON & VANDERHYE P.C. 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 Office for recordation of this document.

258050

PATENT  
REEL: 012532 FRAME: 0261

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

Signature of Inventor  Date 19 DEC 2001  
P J RUSSELL

Witnessed by  Date 19/12/01

Signature of Inventor \_\_\_\_\_ Date \_\_\_\_\_  
T A BIRKS

Witnessed by \_\_\_\_\_ Date \_\_\_\_\_

Signature of Inventor \_\_\_\_\_ Date \_\_\_\_\_  
J C KNIGHT

Witnessed by \_\_\_\_\_ Date \_\_\_\_\_

Signature of Inventor \_\_\_\_\_ Date \_\_\_\_\_  
B J MANGAN

Witnessed by \_\_\_\_\_ Date \_\_\_\_\_

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Witnessed by \_\_\_\_\_ Date \_\_\_\_\_

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IPD/P2828/USW

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Signature of Inventor

P J RUSSELL

Date

Witnessed by

Date

Signature of Inventor

T A BIRKS

Date

17 Dec 2001

Witnessed by

Date

17 December 2001

Signature of Inventor

J C KNIGHT

Date

Witnessed by

Date

Signature of Inventor

B J MANGAN

Date

Witnessed by

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

Signature of Inventor \_\_\_\_\_ Date \_\_\_\_\_  
P J RUSSELL

Witnessed by \_\_\_\_\_ Date \_\_\_\_\_

Signature of Inventor \_\_\_\_\_ Date \_\_\_\_\_  
T A BIRKS

Witnessed by \_\_\_\_\_ Date \_\_\_\_\_

Signature of Inventor J.C. Knight Date 18 December 2001  
J.C. KNIGHT

Witnessed by [Signature] Date 18<sup>th</sup> December 2001

Signature of Inventor \_\_\_\_\_ Date \_\_\_\_\_  
B J MANGAN

Witnessed by \_\_\_\_\_ Date \_\_\_\_\_

Signature of Inventor \_\_\_\_\_ Date \_\_\_\_\_

Witnessed by \_\_\_\_\_ Date \_\_\_\_\_

Signature of Inventor \_\_\_\_\_ Date \_\_\_\_\_

Witnessed by \_\_\_\_\_ Date \_\_\_\_\_

IPD/P2828/USW

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(of QINETIQ LIMITED, Cody Technology Park, Ively Road, Farnborough, Hants GU14 0LX United Kingdom  
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Signature of Inventor

P S RUSSELL

Date

Witnessed by

Date

Signature of Inventor

T A BIRKS

Date

Witnessed by

Date

Signature of Inventor

J C KNIGHT

Date

Witnessed by

Date

Signature of Inventor

 B J MANGAN

Date

10/10/01

Witnessed by

 KAREN KEW

Date

10/10/01

Signature of Inventor

Date

Witnessed by

Date

Signature of Inventor

Date

Witnessed by

Date