Form PTO-1595 1-31-92

P.O. Box 1450

Commissioner of Patents

Ian Charles SAGE

Alexandria, VA 22313-1450

1. Name of conveying party(ies):

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U.S. Department of Commerce Patent and Trademark Office

03-14-2005



102958253

2. Name and address of receiving party(ies):

Name: QINETIQ LIMITED

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

Our Ref.: 124-1066

Wendy Helen HOWIE Internal Address: Ian David BROTHERSTON Street Address: 85 Buckingham Gate Additional name/s of conveying party/ies attached? City: London 3. Nature of conveyance: State/Country: <u>United Kingdom</u> ■ Assignment ☐ Merger Zip: SW1E 6PD ☐ Change of Name Security Assignment Other January 6, 8, 29, 2004 Additional name/s & address/es attached? \(\subseteq \text{Yes} \) No **Execution Date:** 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: B. Patent No(s). A. Patent Application No(s). (1) 10/486.964 (1) (2)(2) (3)(3) Additional numbers attached Yes No 6. Total number of applications & patents involved: 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41) (8021) \$ 40.00 Arthur R. Crawford Name: Authorized to be charged to deposit account #14-1140 Internal Address: 8. The Commissioner is hereby authorized to charge any Street Address: Nixon & Vanderhye P.C. deficiency in the fee(s) filed, or asserted to be filed, or which 1100 North Glebe Road should have been filed herewith (or with any paper thereafter 8th Floor filed in this application by this firm) to our **Account No.** City: Arlington State: VA Zip: 22201 14-1140. DO NOT USE THIS SPACE 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. Arthur R. Crawford March 9, 2005

Total number of pages including original cover sheet, attachments, and document:

03/11/2005 GTON11 00000014 10486964

Name of Person Signing

Reg. No. 25,327

01 FC:8021

933398

PATENT REEL: 016342 FRAME: 0908

Date

[7]

IPD/P3210/USW

ASSIGNMENT OF PATENT APPLICATION

	(SAGE, lan Charles		
	(HOWIE, Wendy Heien		
Inventors)	(BROTHERSTON, lan David		
	In consideration of past and future employment, and my (our) obligation to assign		
	intellectual property generated as result of my (our) employment, the receipt and		
	sufficiency of which consideration is hereby acknowledged, the undersigned agree(s)		
	to assign, and hereby does assign, transfer and set over to		
Assignee)	(QINETIQ LIMITED		
Address)	(of QINETIQ LIMITED, Registered Office 85 Buckingham Gate, London, SW1E 6PD,		
	UK)		
	(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	(in the invention, and all application for patent and any Letters		
Countries)	Patent which may be granted therefore, known as		
Title)	Triboluminesecent Materials And Devices Containing Them		
,	(Case No.P3210/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. <u>10/486,964</u> filed on Feb. 17, 2004		

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.

assignee at the time the invention was made.

(The undersigned acknowledges an obligation of assignment of this invention to said

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: 016342 FRAME: 0909

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned signature(s). Signature of Inventor Date SAGE, lan Charles Witnessed by Date 5/01/2004 Signature of Inventor Date Witnessed by Date 2/1/2004 RRochesser Signature of Inventor Date **BROTHERSTON**, lan David Witnessed by Date Signature of Inventor Date Witnessed by Date Signature of Inventor Date Witnessed by Date Signature of Inventor Date

Date

Witnessed by

IPD/P3210/USW

ASSIGNMENT OF PATENT APPLICATION

SAGE, lan Charles HOWIE, Wendy Helen BROTHERSTON, lan David

(Inventors)

In consideration of past and future employment, and my (our) obligation to assign intellectual property generated as result of my (our) employment, the receipt and sufficiency of which consideration is hereby acknowledged, the undersigned agree(s)

to assign, and nereby does assign, transfer and set over to

(Assignee) (Address)

(QINETIQ LIMITED (of QINETIQ LIMITED, Registered Office 85 Buckingham Gate, London, SW1E 6PD,

UK)

(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) (Title)

in the invention, and all application for patent and any Letters

Patent which may be granted therefore, known as

Triboluminesecent Materials And Devices Containing Them (Case No.P3210/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. appin. Serial No. 10/486,964 _, filea on Feb. 17, 2004 (The undersigned acknowledges an obligation of assignment of this invention to said assignee at the time the invention was made.

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S9-194-SQ#M#TEM#02-NUT-63

REEL: 016342 FRAME: 0911

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

Signature of Inventor	Isan	Date .	29 L Ja 104
	SAGE, lan Charles		
Witnessed by	Alleghes	Date	29/01/04
	•		
Signature of Inventor	HOWIE, Wendy Helen	Date .	
Witnessed by		Date	
Signature of Inventor	BROTHERSTON, lan David	Date .	
Witnessed by		Date	
		•	
Signature of Inventor		Date -	
Witnessed by		Date	
Whitessed by			
Signature of Inventor		Date	
		Data	
Witnessed by		Date	
Signature of Inventor		Date	
Witnessed by		Date -	

IPD/P3210/USW

ASSIGNMENT OF PATENT APPLICATION

/ CACE Jan Charles

	(SAGL, lair Chailes			
	(HOWIE, Wendy Helen			
(Inventors)	(BROTHERSTON, lan David			
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(Assignee)	(QINETIQ LIMITED			
(Address)	(of QINETIQ LIMITED, Registered Office 85 Buckingham Gate, London, SW1E 6PE UK)			
	(hereinafter designated as the Assignee) the undersigned's entire right, title and			
	interest for the United States, its territories, dependencies and possessions, and for			
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Other	(in the invention, and all application for patent and any Letters			
Countries)	Patent which may be granted therefore, known as			
Title)	Triboluminesecent Materials And Devices Containing Them			
•	(Case No.P3210/USW)			
	for which the undersigned has (have) executed on even date herewith an application			
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	(U.S. appln. Serial No. 10/486,964 filed on Feb. 17, 2004			
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258050

PATENT REEL: 016342 FRAME: 0913 In witness whereof, executed by the undersigned on the date(s) opposite the undersigned signature(s).

Signature of Inventor		Date	
	SAGE, Ian Charles		
Witnessed by		Date	
Signature of Inventor	HOWIE, Wendy Helen	Date	
Witnessed by		Date	
Signature of Inventor	BROTHERSTON, Ian David	Date 06/31/34	
Witnessed by		Date	
Signature of Inventor		Date	
Witnessed by		Date	
Signature of Inventor		Date	
Witnessed by		Date	
Signature of Inventor		Date	
Witnessed by		Date	

RECORDED: 03/09/2005