o the Director, U.S. Patent and Trade 1. Name of conveying party(ies): (List using ie.e.) 16316	original documents or copy thereof.
<ol> <li>Name of conveying party(ies): (List using retuend to or numbers for multiple parties)         <ol> <li>Hwa Yaw Tam</li> <li>Weng Hong Chung</li> </ol> </li> <li>Additional name(s) of conveying party(ies) attached?             <ol> <li>Yes</li> <li>No</li> </ol> </li> <li>Nature of conveyance:         <ol> <li>Assignment</li> <li>Security Agreement</li> <li>Merger</li> <li>Change of Name</li> <li>Other:</li> </ol> </li> <li>Execution Date: (List as in section 1 if multiple signatures)         <ol> <li>December 23, 2005</li> <li>December 23, 2005</li> </ol> </li> </ol>	<b>DU685</b> address of receiving party(ies):         Name: The Hong Kong Polytechnic University <b>Address</b> : Partnership Development Office,         Room R1007, Shirley Chan Building,       The Hong Kong Polytechnic University,         Hung Hom <b>City</b> : Kowloon, HONG KONG         Additional name(s) of receiving party(ies) attached?         ()       Yes         4.       US or PCT Application number(s) or US Patent number(s):         (X)       Application(s) filed herewith         Additional numbers attached?         ()       Yes         (X)       Application(s) filed herewith         Additional numbers attached?         ()       Yes
<ul> <li>5. Party to whom correspondence concerning document should be mailed:</li> <li>Customer No. 20,995</li> <li>Address: Knobbe, Martens, Olson &amp; Bear, LLP 2040 Main Street, 14<sup>th</sup> Floor Irvine, CA 92614</li> <li>Return Fax: (949) 760-9502</li> <li>Attorney's Docket No.: WILKG13.001AUS</li> </ul>	<ol> <li>Total number of applications and patents involved: 1</li> </ol>
7. Total fee (37 CFR 1.21(h)): \$40 (X) Enclosed	<ol> <li>Deposit account number: 11-1410</li> <li>Please charge this account for any additional fees which may be required, or credit any overpayment to this account.</li> </ol>
is a true copy of the original document.  Daniel Hart Name of Person Signing 40,637 Registration No.  Total number of pages including cove Documents transmitted via Mail to be recorded with require Mail Stop Assignmer Director, U.S. Patem P.O. E	Ing information is true and correct, and any attached copy Hart Quan 5, 2006 phature Date er sheet, attachments and document: 4 ed cover sheet information to: <b>ht Recordation Services</b> t and Trademark Office Box 1450 VA 22313-1450

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PATENT REEL: 017452 FRAME: 0022

## ASSIGNMENT BY INVENTORS

THIS ASSIGNMENT, made by Hwa Yaw Tam; and Weng Hong Chung (hereinafter referred to as Assignors), residing at 81B, 1/F, JC Castle, 18 Shan Tong Road, Tai Po, New Territories, HONG KONG; and Room 808, Yu Man House, Yu Chui Court, Shatin, New Territories, HONG KONG, respectively;

WHEREAS, Assignors have invented certain new and useful improvements in FBG SENSOR INTERROGATION METHOD USING SEMICONDUCTOR OPTICAL AMPLIFIER IN RING CAVITY CONFIGURATION, set forth in a Patent Application for Letters Patent of the United States, filed herewith; and

WHEREAS, The Hong Kong Polytechnic University, a university, with a place of business at Partnership Development Office, Room R1007, Shirley Chan Building, The Hong Kong Polytechnic University, Hung Hom, Kowloon, HONG KONG (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefore and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made. AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors hereby grant the following individuals 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:

## WILKINSON & GRIST

All practitioners at Customer Number 000040614.

SIGNED this 23 day of <u>December</u> 2005

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Hwa Yaw Tam

Witnessed by: Siu-lau HO

SIGNED this 23 day of December 2005

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Weng Hong Chung

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Witnessed by: Siu-lau HO

PATENT REEL: 017452 FRAME: 0025

RECORDED: 01/05/2006