i	Form PTO-1595 (Rev. 06/04) 08 - 11 - 2	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office	
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6	To the Director of the U.S. Patent and Trademark Office. Please record the attached documents or the address(es) below		
0	Name of conveying party(ies)/Execution Date(s):     Jonathan D. EGAN     Anastasios P. GOUTZOULIS	2. Name and address of receiving party(ies):  NAME: Northrop Grumman Corporation	
	Execution Date(s): 7/31/2006 Additional name(s) of conveying party(ies) attached? attached? Yes X No	ADDRESS: 1840 Century Park East Los Angeles, CA 90067	
	3. Name of Conveyance:    X Assignment	Additional name(s) & addresses(es) attached?	
	4. Application number(s) or patent number(s): X This document is being filed together with a new application		
	A. Patent Application No.(s)	B. Patent No.(s)	
	Additional numbers attached?		
	Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:1	
	Name: Brian S. Rosenbloom Address: Rothwell, Figg, Ernst & Manbeck Suite 800 Street Address: 1425 K St., N.W. City: Washington, State: D.C. Zip: 20005	7. Total fee (37 CFR 3.41): \$ _40  □ Enclosed □ Authorized to be charged to deposit account □ None required (government interest not affecting title)	
	Telephone No.: 202/783-6040 Facsimile No.: 202/783-6031 Email Address: Attorney Docket No.: 2662-208	Deposit account number: 02-2135  Authorized User Name Brian S. Rosenbloom	
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01 FC:8021 40.00 DA DO NOT USE THIS SPACE			
	9. Signature.  Signature  Signature		
	Brian S. Rosenbloom, Reg. #41,276 Total number of pages including cover sheet, attachments and documents: 3  Name of Person Signing		

PATENT REEL: 018141 FRAME: 0023

## **ASSIGNMENT**

WHEREAS, WE, Jonathan D. EGAN, a citizen of the United States, residing at 6356 Ducketts Lane, Elkridge, MD 21075 and Anastasios P. GOUTZOULIS, a citizen of the United States, residing at 640 Sean Lane, Annapolis, MD 21401, are the inventors of an invention in SYSTEMS AND METHODS FOR MEASURING SIGNAL PHASE SHIFT CAUSED BY OPTICAL FIBERS for which we have executed an application for Letters Patent of the United States, of even date herewith; and

WHEREAS, Northrop Grumman Corporation, incorporated in the state of Delaware, with a place of business at 1840 Century Park East, Los Angeles, CA is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application;

NOW, THEREFORE, be it known that, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we the said Jonathan D. EGAN and Anastasios P. GOUTZOULIS have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said Northrop Grumman Corporation, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may hereafter be filed for said invention in any country or countries foreign to the United States, and all extensions, renewals and reissues thereof and all rights of priority in any such country or countries based upon the filing of the said application for Letters Patent of the United States which are created by any law, treaty or international convention; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said Northrop Grumman Corporation, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said Northrop Grumman Corporation, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said Northrop Grumman Corporation, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

IN TESTIMONY WHEREOF, we hereunto set our hands and seals the day and year set opposite our respective signatures.

Assignment - Page I

PATENT REEL: 018141 FRAME: 0024 Date 7/31/06 2006 Anastasios P. GOUTZOULIS

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