PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Thomas C. Farrell	10/27/2006

RECEIVING PARTY DATA

Name:	Northrop Grumman Space & Missions Systems Corp.	
Street Address:	1840 Century Park East	
City:	Los Angeles	
State/Country:	CALIFORNIA	
Postal Code:	90067	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11590299

CORRESPONDENCE DATA

Fax Number: (248)364-4285

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 248-364-4300

Email: carlson@warnhoffmann.com

Correspondent Name: John A. Miller Address Line 1: P.O. Box 70098

Address Line 4: Rochester Hills, MICHIGAN 48307

ATTORNEY DOCKET NUMBER:	NGC-00111(001544-804)
NAME OF SUBMITTER:	John A. Miller

Total Attachments: 2

 $source = NGC-00111-1544-804_assignment\#page1.tif\\ source = NGC-00111-1544-804_assignment\#page2.tif$

OP \$40.00 1

PATENT REEL: 018920 FRAME: 0409

ASSIGNMENT

WHEREAS, I, Thomas C. Farrell, hereinafter referred to as Assignor, have invented certain new and useful improvements in OPTICAL ARCHITECTURE REQUIRING A SINGLE TILT MIRROR TO PASS A COLLIMATED BEAM THROUGH AN APERTURE STOP, CENTERED, AT A DESIRED ANGLE, IN ONE OR TWO DIMENSIONS, described in an application for United States Letters Patent, executed by me on the date as stated below;

WHEREAS, Northrop Grumman Space & Missions Systems Corp., an Ohio corporation, having its principal place of business at 1840 Century Park East, Los Angeles, California 90067, hereinafter referred to as Assignee, is desirous of acquiring the entire right, title and interest in, to and under said improvements and said application:

NOW, THEREFORE, in consideration of Assignor's obligations to Northrop Grumman Space & Missions Systems Corp., and for other good and valuable consideration, the receipt and sufficiency is hereby acknowledged, Assignor has sold, assigned, transferred and set over, and by these presents does hereby sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, Assignor's entire right, title and interest in, to and under said improvements, and said application and all divisions, renewals, continuations, and continuations-in-part thereof, and all United States Letters Patent which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, including the full right to claim for any such application the priority benefits of the International Convention for the Protection of Industrial Property and other priority-conferring treaties, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, divisions, continuations, continuations-in-part, renewals and reissues thereof; and Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks 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 improvements to said Assignee, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

Assignor hereby acknowledges that at the time of making the improvements herein identified, Assignor was under an obligation to assign to Assignee, Assignor's entire right, title and interest in, to and under said improvements;

Assignor hereby covenants that Assignor has full right to convey the interest herein assigned, and that Assignor has not executed, and will not execute, any agreement in conflict herewith and that Assignee, Northrop Grumman Space & Missions Systems Corp., its successors, assigns and other legal representatives shall have the right to hold and enjoy for its and their own use and benefit, to the end of the term or terms for which such Letters Patent shall or may be granted, reissued or extended as fully and completely as the same right or could have been held and enjoyed by Assignor had this Assignment not been made.

Assignor hereby further covenants and agrees to communicate to Assignee, its successors, legal representatives and assigns, any and all facts known to Assignor respecting said improvements; to promptly provide Assignee with all documents relating to said improvements, said invention, and said Letters Patent as may be known or accessible to Assignor; to testify as to the same in any interference or litigation or other legal proceedings related thereto; to sign all lawful papers, execute all extensions, continuations, continuations-in-part, divisional and reissue applications; and to make all rightful oaths or declarations and generally do everything possible to aid Assignee, its successors, legal representatives and assigns in obtaining and enforcing all the rights herein conveyed for said improvements in all countries without further compensation, but at the expense of Assignee, its successors, legal representatives and assigns.

Page 1 of 2

Attorney Docket No. NGC-00111(001544-804)

day of 2006, and has executed ay of 2006.	s executed and delivered this instrument this $\frac{27}{27}$ ted the referenced patent application on the
	Thomas C Formall
	Thomas C. Farrell, Assignor
and the state of t	
STATE OF CALIFORNIA	
COUNTY OF LOS ANGELES) ss	
On October 200 before me, Lorna L. Thomas C. Farrell, known-to-me—or—proved to m person whose name is subscribed to this instrument ar in his authorized capacity, and that by his signature on behalf of which the person acted, executed the instrument	e on the basis of satisfactory evidence to be the nd acknowledges to me that he executed the same the instrument to be the person or the entity upon
WITNESS my hand and official seal LORNA L. SCHOIT COMM. # 1449123 NOTEST PUBLIC -CAUFORNA Lor Angeles County My Coron. Supines Nov. 3. 2007	Notary's Signature

REEL: 018920 FRAME: 0411

(Seal)