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Form PTO-1595 R1 (Rev. 10/02) OMB No. 0654 0007 (avr. 6/20/2005)	U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office	
Tab settings ⇒⇒ ▼ 1 1024	5950,1	
	: Please record the attached original documents or copy thereof.	
1. Name of conveying party(ies): Dale J. Durand Quentin P. Herr Mark W. Johnson	Name and address of receiving party(ies) Name:Northrop Grumman Corporation Internal Address:	
Additional name(s) of conveying party(ies) attached? Yes No		
3. Nature of conveyance:	-	
Assignment Merger	Street Address: 1840 Century Park Plaza	
Security Agreement Change of Name Other		
4-28-2003 Execution Date:	City: Los Angeles State: CA Zip: 90067-2199 Country: Additional name(s) & address(es) attached? Yes No	
4. Application number(s) or patent number(s):		
A. Patent Application No.(s) 10/429,479 Additional numbers at		
5. Name and address of party to whom correspondence concerning document should be mailed:		
Name: John A. Miller	7. Total fee (37 CFR 3.41)\$	
Internal Address:	✓ Enclosed	
	Authorized to be charged to deposit account	
Street Address: P.O. Box 70098	8. Deposit account number:	
City: Rochester Hills State: MI Zip: 48307	2: 19 CTION	
DO NOT USI	E THIS SPACE	
9. Signature. 2003 LHUELLER 00000009 10429479 8021 40.00 0P John A. Miller Ohn a Mull May 19, 2003		
Name of Person Signing Signature Date		
Total number of pages including you	er sheet, attachments, and documents:	

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments

Docket No. NGC-00073(000275-

ASSIGNMENT

Atty. Docket No. NGC-00073 (000275-804)

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

APPLICATION OF SINGLE FLUX QUANTUM PULSE INTERACTION TO THE SIMULTANEOUS SAMPLING IN-PHASE AND QUADRATURE ANALOG-TO-DIGITAL CONVERTER

for which Assignor is about to make or has made United States or International application for patent

(a)	executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration and Power of Attorney);
(b)	executed on,; or
(C)	filed on, and assigned Serial No or PCT International Application No;
(d)	U.S. Patent No, issued; and

WHEREAS, Northrop Grumman Corporation, a Delaware corporation, with its principal place of business located at 1840 Century Park East, Los Angeles, California 90067-2199, hereinafter referred to as Assignee, is desirous of acquiring an interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor by these presents does sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and all foreign countries, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the said invention as described in the aforesaid application, said application for patent and all Letters Patent therefor to be held and enjoyed by Assignee to the full end of the term for which said Letters Patent are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to recover for past infringements of, or liabilities for, any of the rights relating to any of said applications or patents resulting therefrom;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, reexamination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale or agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue said Letters Patent, Utility Model Registration or Inventor's Certificate to Assignee.

Assignor hereby authorizes and requests my attorney to insert here in parentheses (Application No. 10/429, 479, filed 5/5/03) the filing date and application number of said application when known.

Page 1 of 2

ASSIGNMENT

Dale J. Durand (First inventor)	Date: 4/28/03
Quentin P. Herr (Second inventor)	Date: 4/28/03
Mark W. Johnson (Third inventor)	Date: 4/28/2003

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RECORDED: 05/27/2003

PATENT REEL: 014100 FRAME: 0305