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OMB No. 0651-0027 (exp. 6/30/2005)	102605426	
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To the Honorable Commissioner of Pat	ents and Trademarks: Please record the att	ached original documents or copy thereof.
Name of conveying party(ies):	//- / / 	ddress of receiving party(ies)
Barry Ross Allen	112 3	throp Grumman Corporation
Daniel Kwok-hung Ko	Internal Add	
David Joseph Brunone	Internal Add	ress:vio
Additional name(s) of conveying party(ies) attached	ed? 🖵 Yes 🖾 No —————	705 = 205 =
Nature of conveyance:		10/
🖾 Assignment 🚨 M	Merger	
☐ Security Agreement ☐ C	Street Addre	ess: 1840 Century Park East
Security Agreement	mange of Name	
☐ Other		
	City: Los	Angeles State: CA Zip: 90067-2199
Execution Date: November 6 & 11, 200	Additional name	v(s) & address(es) attached? Yes No
4. Application number(s) or patent num	iber(s):	
If this document is being filed together	er with a new application, the execu	tion date of the application is: same
A. Patent Application No.(s)	5 587 B. Patent No	D.(s)
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Name and address of party to whom concerning document should be mail	•	of applications and patents involved:
Name:William A. Blake	7. Total fee (37	CFR 3.41)\$40.00
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<u> </u>	8. Deposit acco	ount number:
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William A. Blake William A Rling 11/13/2003		
Name of Person Signing Signature Date		
Total number o	of pages including cover sheet, attachments,	and documents: 5

For: U.S. Rights and Foreign Rights

For: U.S. Application

By: Inventors

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNORS of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS:

Barry Ross Allen 9 Via Sevilla Rolling Hills Estates, CA 90274

Nationality: US

Daniel Kwok-hung Ko 1028 Greenfield Ave. Arcadia, CA 91006

Nationality: US

David Joseph Brunone 27419 Fawnskin Drive

Rancho Palos Verdes, CA 90275

Nationality: US

hereby sell, assign and transfer to

ASSIGNEE:

Northrop Grumman Corporation 1840 Century Park East Los Angeles, CA 90067-2199 Nationality: Delaware

and the successors, assigns and legal representatives of the ASSIGNEE the entire right, title and interest for the United States and its territorial possessions and in all foreign countries, including all rights to claim priority, in and to any and all improvements which are disclosed in the invention entitled:

SUSPENDED SUBSTRATE LOW LOSS COUPLER

Assignment of Invention-Multiple Inventors-page 1 of 2

PATENT REEL: 014702 FRAME: 0080 and which is found in (37 C.F.R. § 3.21) U.S. patent application executed on even date herewith and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof.

ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

ASSIGNORS further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNORS and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

Date: November 11, 2003	Signature of Barry Ross Allen	
Date:	Signature of Daniel Kwok-hung Ko	
Date: Noucuber 11,2003	Signature of David Joseph Brunone	

Practitioner's Docket No. 48-0018

PATENT

For: U.S. Rights and Foreign Rights

For: U.S. Application

By: Inventors

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Assignment of Invention-Multiple Inventors-page 1 of 2

PATENT REEL: 014702 FRAME: 0082

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and which is found in (37 C.F.R. § 3.21) U.S. patent application executed on even date herewith and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof.

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Date:	
Date: War6-th, 2003	Signature of Barry Ross Allen Signature of Daniel Kwok-hung Ko
Date:	Signature of David Joseph Brunone

Assignment of Invention-Multiple Inventors-page 2 of 2

PATENT REEL: 014702 FRAME: 0083