OMB No. 0651-0027 (exp. 6/30/2005)	-01-2005 U.S. DEPARTMENT OF COMME iited States Patent and Trademark C
RE	
	3128860 <u>ients or the new address(es) below.</u>
1. Name of conveying party(ies) Terence F. W. Hall	2. Name and address of receiving party(ies)
Totolico I. W. Hall	Name: Northrop Grumman Corporation
	Internal Address:
Additional name(s) of conveying party(ies) attached? Yes	No.
3. Nature of conveyance/Execution Date(s):	Street Address: 1840 Century Park East
Execution Date(s) Hall 10/31/05	
X Assignment Merger	
Security Agreement Change of Name	City: Los Angeles
Joint Research Agreement	State: CA
Government Interest Assignment Executive Order 9424, Confirmatory License	Country: <u>USA</u> Zip: 90067-2199
Other	
	Additional name(s) & address(es) attached? Yes X
A. Patent Application No.(s)	s document is being filed together with a new application B. Patent No.(s)
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:1
Name: Bruce B. Brunda	
Internal Address:	7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00
memai Address.	
	Authorized to be charged to deposit account
Street Address: 75 Enterprise, Suite 250	- X Enclosed
	None required (government interest not affecting ti
City: Aliso Viejo	8. Payment Information
State: CA Zip: 92656	a. Credit Card Last 4 Numbers Expiration Date
Phone Number: <u>(949) 855-1246</u>	
Fax Number: (949) 855-6371	b. Deposit Account Number
Email Address: bbrunda@stetinalaw.com	Authorized User Name
9. Signature: Q / Dern	11/ 1
Signature	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Bruce B. Brunda	Total number of pages including cover
	sheet, attachments, and documents:
Name of Person Signing	
Documents to be recorded (including cover she	pet) should be faxed to (703) 306-5995, or mailed to:
Documents to be recorded (including cover she Mail Stop Assignment Recordation Services, Director	
Documents to be recorded (including cover she	pet) should be faxed to (703) 306-5995, or mailed to:

PATENT REEL: 017280 FRAME: 0685

ASSIGNMENT
WHEREAS, I, <u>Terence F.W. Hall</u> , hereinafter referred to as Assignor have invented certain new and useful improvements in TECHNIQUE FOR AUTOMATICALLY ANALYZING Z-PIN DYNAMIC INSERTION DATA TO DETERMINE IF AN AUTOMATED ACCEPTABLE VERSION WAS PERFORMED, described in an application for United States Letters Patent, executed by me on the date as stated below;
WHEREAS, Northrop Grumman Corporation, a Delaware 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 Corporation, 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 Corporation, 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 Assignor 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.
IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this 31 ⁵⁷ day of 0 CTOBER, and has executed the referenced patent application on the day of, 20
Terence F. W. Hall Terence F.W. Hall
STATE OF
COUNTY OF
On
, personally known to me B or B proved to me on the basis of

Notary=s Signature (Seal)

satisfactory evidence to be the person(s) whose name(s) is/are subscribed to this instrument and acknowledge to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument to be the person(s), or

the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

RECORDED: 11/22/2005

PATENT REEL: 017280 FRAME: 0686