

04-28-2003

FORM PTO-1596
1-31-92

RECORDATION

DEPARTMENT OF COMMERCE
Patent and Trademark Office

DOCKET NO.: AME-1413 (3351-066) PAT

102432376

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereto:

1. Name of conveying party(ies): Conrad Rose		2. Name and address of receiving party(ies): Name: Northrop Grumman Corporation Internal Address: Street Address: 1840 Century Park East City: Los Angeles State or Area: CA Zip/Postal Code: 90067-2199 Country: USA	
Additional name(s) of conveying party(ies) attached?			
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other			
Execution Date: April 9, 2003		Additional name(s) & address(es) attached? NO	
4. Application number(s) or patent number(s): If the document is being filed together with a new application, the execution date of the application is: April 9, 2003			
A. Patent Application No(s).		B. Patent No(s).	
Additional numbers attached? NO			
5. Name and address of party to whom correspondence concerning document should be mailed: Name: LOWE HAUPTMAN GILMAN & BERNER Internal Address: Street Address: 1700 Diagonal Road, Suite 310 City: Alexandria State: VA ZIP: 22314		6. Total number of applications and patents involved: one 7. Total fee (37 CFR 3.41) \$40.00 <input checked="" type="checkbox"/> Credit Card payment form enclosed <input type="checkbox"/> Authorized to be charged to deposit account 8. Deposit account number: 07-1337	
DO NOT USE THIS SPACE			
9. Statement and signature. <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> Randy A. Noranbrock Reg. No. 42,940 <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;"> Signature </div> <div style="text-align: center;"> April 21, 2003 Date </div> </div>			
Total number of pages comprising cover sheet: 2			
CMB No. 0851-0011 (exp. 4/94)			

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:\30-0-3999\3351 LITTON SYSTEMS, INC\3351-066\Assignment Transmittal Form dated 4-21-03.doc

04-28-2003

PATENT
REEL: 013990 FRAME: 0479

Docket No.: AME-1413 (3351-066)

ASSIGNMENT

WHEREAS I, Conrad Rose, of King George, Virginia, have made a certain new invention as set forth in an application for United States Letters Patent, entitled **A METHOD OF PASSIVELY ESTIMATING AN EMITTER'S POSITION AND VELOCITY USING BEARINGS-ONLY WITHOUT REQUIRING OBSERVER ACCELERATION**, executed by me on the date of execution of this document, as shown below, and filed concurrently herewith:

AND WHEREAS, Northrop Grumman Corporation, a corporation of the State of Delaware and having an address of 1840 Century Park East, Los Angeles, California 90067-2199, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefor:

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, I do hereby sell, assign, transfer and set over unto **Northrop Grumman Corporation**, its legal representatives, successors, and assigns, the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including any continuations, continuations-in-part, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention;

UPON SAID CONSIDERATIONS, I hereby agree with the said assignee that I will not execute any writing or do any act whatsoever conflicting with these presents, and that I will, at any time upon request, without further or additional consideration but at the expense of said assignee, execute such additional assignments and other writings and do such additional acts as said assignee may deem necessary or desirable to perfect the assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or chooses in action accruing as a result of such applications or patents, by giving testimony in any proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of assignor and assignee;

AND I request the Commissioner of Patents and Trademarks to issue any Letters Patent of the United States which may be issued for said invention to **Northrop Grumman Corporation**, its legal representatives, successors or assigns, as the sole owner of the entire right, title and interest in and to said patent and the invention covered thereby.

4/14/03
Date

Conrad Rose
Conrad Rose