

05-16-2001

PATENTS ONLY

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NORTH-394A/A-2243



TO THE HONORABLE

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ND TRADEMARKS

Please record the attached original document or copy thereof.

JD978 U.S. PTO  
09/04/01  
05/02/01

1. Name of Party(ies) conveying an interest:

David L. Richardson'  
Barry L. Head

2. Name and Address of Party(ies) receiving an interest:

NORTHROP GRUMMAN CORPORATION  
1840 Century Park East  
Los Angeles, , CA 90067-2199

3. Description of the instrument of conveyance: ASSIGNMENT

4. This document is being filed together with a new application, the execution date of the application is:

David L. Richardson - April 18, 2001  
Barry L. Head - April 20, 2001

Date

The title is: ENERGY CONSERVING SATELLITE TRACKING TAG

091847775

5. Name and address of party to whom correspondence concerning document should be mailed:

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

6. Number of applications/patents involved:

1

7. Amount of fee enclosed or authorized to be charged:

\$40.00

8. Deposit account number (Attach duplicate copy of this form if paying by deposit account:

14-1325

DO NOT USE THIS SPACE

9. Date of execution of attached document: David L. Richardson-April 19, 2001  
Barry L. Head-April 20, 2001.

10. To the best of my knowledge and belief, the information contained on this coversheet is true and correct and any copy submitted is a true copy of the original document.

5/2/01  
Date

Bruce B. Brunda

05-15/2001 LABELER 00000139 141325 (0454775)  
01 00-588 46,30 08

NORTH- 394A

A- 2243

ASSIGNMENT

WHEREAS, I, David L. Richardson, hereinafter referred to as Assignor  
together with Barry I. Head

have jointly invented certain new and useful improvements in

ENERGY CONSERVING SATELLITE TRACKING TAG

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, and for other good and valuable consideration, the receipt and sufficiency of which 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, to and under said improvements;

Assignor hereby covenants that Assignor has full right to convey the interest herein signed, and that Assignor has not executed, and will not execute, any agreement in conflict herewith and that Assignee, Northrop 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 fully and completely as the same might 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 reference or litigation or other legal proceedings related thereto; to sign all lawful papers, execute all extensions, continuations, continuations-in-part, divisional and reissue applications; 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  
18<sup>th</sup> day of April, 2001, and has executed the referenced patent  
application on the 18<sup>th</sup> day of April, 2001

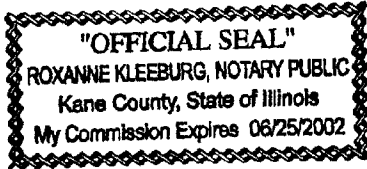
David L. Richardson

(Assignor) David L. Richardson

STATE OF ILLINOIS )  
COUNTY OF COOK ) ss

On APRIL 18<sup>th</sup> 2001 before me,  
Roxanne Kleeburg, personally  
appeared DAVID L. Richardson, personally known to me  
or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are  
subscribed to this instrument and acknowledged to me that he/she/they  
executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s)  
in the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed  
the instrument.

WITNESS my hand and official seal



Signature

Roxanne Kleeburg (Seal)

WHEREAS, I, Barry L. Head, hereinafter referred to as Assignor together with David L. Richardson

have jointly invented certain new and useful improvements in

ENERGY CONSERVING SATELLITE TRACKING TAG

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, and for other good and valuable consideration, the receipt and sufficiency of which 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 under 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 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 fully and completely as the same might 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; 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 reference or litigation or other legal proceedings related thereto; to sign all lawful papers, execute all extensions, continuations, continuations-in-part, divisional and reissue applications; 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 20th day of APRIL, 192001, and has executed the referenced patent application on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

Barry L. Head  
(Assignor) Barry L. Head  
STATE OF ARIZONA )  
COUNTY OF MARICOPA ) ss

On APRIL 20 2001 before me,  
MAXINE LYMAN, personally  
appeared BARRY L. HEAD, personally known to me  
or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are  
subscribed to this instrument and acknowledged 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 the person(s), or the entity upon behalf of which the person(s) acted, executed  
the instrument.

WITNESS my hand and official seal

Signature Maxine Lyman (Seal)

