

04-20-2000

FORM PTO-1595
1-31-92



U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

To the Honorable Commissioner of P.

101327579

ached original documents or copy thereof.

1. Name and Address of Conveying Party(ies):

RAYTHEON COMPANY

Corporation/State: Delaware

3-13-00

Additional name(s) of conveying party(ies) attached?
 Yes No

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

Name: ORBITAL SCIENCES CORPORATION

Internal Address:

Street Address: 20301 Century Boulevard

City: Germantown

State: Maryland

Corporation/State: Delaware

Additional name(s) & address(es) attached? Yes No

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OPR/FINANCE

3. Nature of conveyance:

- Assignment
- Security Agreement
- Other
- Merger
- Change of Name

Effective Date: December 31, 1998

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No. (s) 09/177,783

B. Patent No. (s) 5,223,844; 5,808,565

Additional Numbers attached? Yes No

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

Name: Harold E. Meier, Esq.

Internal Address: Baker & Botts, L.L.P.

Street Address: 2001 Ross Avenue

City: Dallas

State: Texas Zip: 75201

6. Total number of applications and patents involved: Three (3)

7. Total Fee (37 CFR 3.41): \$120.00

Enclosed

Authorized to be charged to deposit account

8. Deposit account number:

(Attach Duplicate Copy of this page if paying by deposit account)

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9. Statement and signature.

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.

Harold E. Meier

Harold E. Meier

3/3/2000

Name of Person Signing

Signature

Date

Total number of pages including cover sheet

6

OMB No. 0651-0011 (exp. 4/94)

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Washington, D.C. 20231

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PATENT ASSIGNMENT

WHEREAS, RAYTHEON COMPANY (hereafter "Assignor"), a Delaware corporation, having an address of 141 Spring Street, Lexington, Massachusetts 02421, is the owner of the patents and patent applications set forth on Exhibit A hereto and the inventions described and claimed therein (hereafter the "Patent Property"); and

WHEREAS, ORBITAL SCIENCES CORPORATION (hereafter "Assignee"), a Delaware corporation, having an address of 20301 Century Boulevard, Germantown, Maryland 20784, did acquire all right, title and interest in and to the Patent Property as the results of a transfer of certain assets effective December 31, 1998.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor does hereby sell, assign, transfer and set over *nunc pro tunc* to Assignee, all its right, title and interest in and to the Patent Property, as well as all reissues and extensions thereof, the same to be held and enjoyed by Assignee for its own use and benefit, and for the use and benefit of its successors, assigns, or legal representatives, to the end of the term or terms for which such Patent Property may be granted or reissued, as fully and entirely as the same would have been held and enjoyed by Assignor if this assignment and sale had not been made.

Assignor also assigns to Assignee, all right, title and interest in and to the inventions disclosed in said Patent Property throughout the world, including the right to file applications and obtain patents, utility models, industrial models and designs for said Patent Property in its own name throughout the world, including all rights to publish cautionary notices reserving ownership of said inventions and all rights to register said Patent Property in appropriate registries; and Assignor further agrees to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect such right, title and interest in Assignee.

Assignor also assigns unto Assignee all claims for damages by reason of infringement prior to the assignment date of the Patent Property throughout the world, with the right to sue for and collect the same for its own use and benefit, and for the use and benefit of its successors, assigns and other legal representatives.

Assignor also will, at the expense of Assignee, testify in any legal proceedings, sign all lawful papers, execute all provisional, divisional, continuation, continuation-in-part, reissue and substitute applications, make lawful oaths and declarations, and generally do everything possible to vest title in Assignee and to aid Assignee to obtain and enforce proper protection for said Patent Property in all countries.

IN WITNESS WHEREOF, the parties have caused this Patent Assignment to be executed on the dates and in the capacities shown below.

RAYTHEON COMPANY

ORBITAL SCIENCES CORPORATION

By: Michael C. Eberhardt
Michael C. Eberhardt
Its: Assistant Secretary
Date: 12-8-99

By: [Signature]
Richard W. Sherman
Its: Assistant Secretary
Date: 2/7/00

STATE OF TEXAS

§

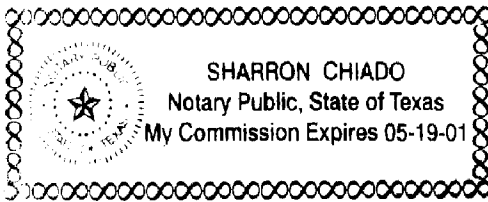
§

COUNTY OF DALLAS

§

Before me, the undersigned, a Notary Public on this day personally appeared MICHAEL C. EBERHARDT, known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said RAYTHEON COMPANY, a Delaware corporation, and that he had executed the same as the act of such corporation for the purpose and consideration therein expressed, and in the capacity therein stated.

Given under my hand and seal of office this 9th day of December, 1999.



Sharron Chiado
Notary Public in and for
the State of Texas

STATE OF MARYLAND

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COUNTY OF FREDERICK

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Before me, the undersigned, a Notary Public on this day personally appeared Richard W. Sherman, known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said ORBITAL SCIENCES CORPORATION, a Delaware corporation, and that he had executed the same as the act of such corporation for the purpose and consideration therein expressed, and in the capacity therein stated.

Given under my hand and seal of office, this 7th day of February, ~~1999~~ 2000.

“OFFICIAL SEAL”
ANDREA H. ESHBAUGH
NOTARY PUBLIC, STATE OF MARYLAND
My Commission Expires 8/1/00

Andrea H. Eshbaugh
Notary Public in and for
the State of Maryland

EXHIBIT A

U.S. Patents

<u>Patent No.</u>	<u>Issue Date</u>	<u>Title</u>
5,223,844	06/29/93	Vehicle Tracking and Security System
5,808,565	09/15/98	GPS Triggered Automatic Annunciator for Vehicles

U.S. Patent Applications

<u>Appl. No.</u>	<u>Filing Date</u>	<u>Title</u>
09/177,783	10/22/98	Method and System for Regulating Switching of a Traffic Light

Foreign Patents

<u>Country</u>	<u>Patent No.</u>	<u>Issue Date</u>	<u>Title</u>
Venezuela	845/94	10/31/97	Vehicle Tracking and Security System

Foreign Patent Applications

<u>Country</u>	<u>Appl. No.</u>	<u>Filing Date</u>	<u>Title</u>
Singapore	n/a	10/13/99	Method and System for Regulating Switching of a Traffic Light
Netherlands	n/a	10/18/99	Method and System for Regulating Switching of a Traffic Light
Italy	n/a	10/__/99	Method and System for Regulating Switching of a Traffic Light