

MRD 5-22-98  
09/083600

06-09-1998

COVER SHEET



PD-970537

100730384

To the Honorable Commissioner of

Record the attached original documents or copy thereof.

1. Name of conveying party(ies):

2. Name and address of receiving party(ies):

Tzeng S. Chen  
Steven C. Matthews

Name: RAYTHEON COMPANY

Internal Address: Bldg. R11, M/S M365  
P.O. Box 902  
El Segundo, California 90245-0902

Additional Name(s) of conveying party(ies) attached?  
yes  no

3. Nature of Conveyance:

Street Address: 2000 E. El Segundo Boulevard  
Bldg. R11, M/S M365  
El Segundo, California 90245

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

Additional name(s) & address(es) attached?  yes  no

Execution Date: March 16, 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: March 16, 1998;

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached?  yes  no

Jc551 U.S. PTO  
09/083600  
05/22/98

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

6. Total number of applications and patents involved: [ 1 ]

Name: Patent Docket Administration  
Internal Address: RAYTHEON COMPANY  
Building R11, M/S M365  
P.O. Box 902  
El Segundo, California 90245-0902

7. Total fee (37 CFR 3.41)..... \$40.00

- Enclosed
- Authorized to be charged to deposit account

Street Address: 2000 E. El Segundo Boulevard  
Bldg R11, M/S M365  
El Segundo, California 90245

8. Deposit account number:

18-0550

(Attached duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

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.

Leonard A. Alkov

May 22, 1998

Name of Person Signing

Signature

Date

06/04/1998 JMWTKINS 00000156 180550 09083600

01 FC:581 10.00 CH

Total number of pages comprising cover sheet: [ 4 ]

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

PATENT

REEL: 9212 FRAME: 0692

## ASSIGNMENT

WHEREAS, I, as below named sole inventor (if only one name is listed below) or joint inventor (if plural names are listed below) of the city and state as stated below next to my name, have invented a(an) HIGH BEAM QUALITY OPTICAL PARAMETRIC OSCILLATOR for which application for Letters Patent of the United States has been executed by me on this day, or (if the following is completed) filed on as Serial No. /,; and

WHEREAS, RAYTHEON COMPANY (hereinafter referred to as RAYTHEON), a Delaware Corporation, having its principal place of business in Los Angeles, California, is desirous of acquiring the entire and exclusive right, title and interest in, to and under said invention, said application and any and all Letters Patent that may be granted therefor in the United States and throughout the world;

NOW, THEREFORE, in consideration of the obligations voluntarily assumed by me and set forth in an invention agreement between me and RAYTHEON, effective the date as stated below next to my name, and other good and valuable consideration, receipt of which is hereby acknowledged, I do hereby sell, assign and transfer to RAYTHEON, its successors, assigns or other legal representatives, the entire and exclusive right, title and interest in and to said invention invented by me, to said application and any and all applications which are continuations, continuations-in-part, divisions or substitutes of said application and any and all Letters Patent that may be granted therefor in the United States and throughout the world on any of said applications and to any and all reexaminations, reissues, renewals or extensions of said Letters Patent in the United States and throughout the world for the full term or terms for which said Letters Patent may be granted in the United States and throughout the world; authorize and request The Assistant Commissioner for Patents of the United States and all foreign countries to issue all such Letters Patent to said RAYTHEON, its successors, assigns or other legal representatives; covenant that no assignment, sale, agreement, transfer or encumbrance has been, or will be, made or entered into which would conflict with this agreement, sale and transfer; and agree to communicate to RAYTHEON, its successors, assigns or other legal representatives, upon request and at no cost or expense to me, any facts known by me respecting said invention, do all lawful acts, including the execution and delivery of all papers and proper oaths and giving of testimony that is deemed necessary or desirable by RAYTHEON, its successors, assigns or other legal representatives with regard to said invention for protecting, obtaining, maintaining and enforcing any and all of said Letters Patent in the United States and throughout the world for said invention and for perfecting, affirming, recording and maintaining the title of RAYTHEON, its successors, assigns or other legal representatives, and generally cooperate to the fullest extent in all matters pertaining to said invention, and any and all of said Letters Patent and the title thereto in RAYTHEON, its successors, assigns or other legal representatives.

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR TZENG S. CHEN	INVENTOR'S SIGNATURE <i>Tzeng S. Chen</i>	DATE 3-16-98
RESIDENCE (CITY AND STATE) 28505 LEACREST DR RNCHO PALOS VRDS, CA 90275		INVENTION AGREEMENT DATE April 21, 1986

FULL NAME OF SOLE OR JOINT INVENTOR STEVEN C. MATTHEWS	INVENTOR'S SIGNATURE <i>Steve Matthews</i>	DATE 3-16-98
RESIDENCE (CITY AND STATE) 860 ILIFF ST PACIFIC PALISADE, CA 90272		INVENTION AGREEMENT DATE August 13, 1984

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE

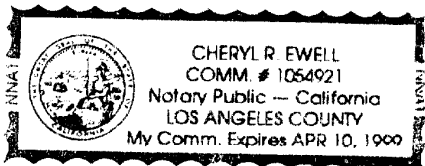
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE

STATE OF CALIFORNIA )  
COUNTY OF LOS ANGELES ) SS:  
On 3-16-98 before me, CHERYL R. EWELL  
a Notary Public in and for said State, personally appeared TZENG S. CHEN

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 the within 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.



Notary Public

*Cheryl R. Ewell*

PATENT

REEL: 9212 FRAME: 0694

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

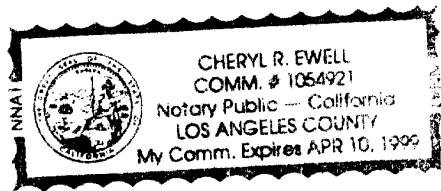
State of CALIFORNIA

County of LOS ANGELES

On 3-16-98 before me, CHERYL R. EWELL,  
DATE NAME, TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC"

personally appeared STEVEN C. MATTHEWS,  
NAME(S) OF SIGNER(S)

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 the within 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]  
SIGNATURE OF NOTARY

**OPTIONAL**

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

**CAPACITY CLAIMED BY SIGNER**

- INDIVIDUAL
- CORPORATE OFFICER
- \_\_\_\_\_ TITLE(S)
- PARTNER(S)       LIMITED
- GENERAL
- ATTORNEY-IN-FACT
- TRUSTEE(S)
- GUARDIAN/CONSERVATOR
- OTHER: \_\_\_\_\_

**DESCRIPTION OF ATTACHED DOCUMENT**

Assignment PD-970537  
TITLE OR TYPE OF DOCUMENT

\_\_\_\_\_  
NUMBER OF PAGES

\_\_\_\_\_  
DATE OF DOCUMENT

**SIGNER IS REPRESENTING:**  
NAME OF PERSON(S) OR ENTITY(IES)  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
SIGNER(S) OTHER THAN NAMED ABOVE