



07-14-2000



101402845

U.S. Department of Commerce  
Patent and Trademark Office  
**PATENT**

**RECORDATION FORM COVER SHEET  
PATENTS ONLY**

PD-970480

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

**Submission Type**

☒ **New**

☐ **Resubmission (Non-Recordation)**  
Document ID#

☐ **Correction of PTO Error**  
Reel #  Frame #

☐ **Corrective Document**  
Reel #  Frame #

**Conveyance Type**

☒ **Assignment** ☐ **Security Agreement**

☐ **License** ☐ **Change of Name**

☐ **Merger** ☐ **Other**

**U.S. Government**  
(For Use ONLY by U.S. Government Agencies)

☐ **Departmental File** ☐ **Secret File**

**Conveying Party(ies)**

☐ Mark if additional names of conveying parties attached

Execution Date  
Month Day Year

Name (line 1)

Name (line 2)

**Second Party**

Name (line 1)

Name (line 2)

**Receiving Party**

☐ Mark if additional names of receiving parties attached

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

**Domestic Representative Name and Address**

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

07/11/2000 ASCOTT 00000155 500616 09516812

FOR OFFICE USE ONLY

01 FC:581 40.00 CH

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

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

**PATENT**  
**REEL: 010907 FRAME: 0814**

**Correspondent Name and Address**

Area Code and Telephone Number (310) 647-3214

Name Patent Records Administration

Address (line 1) RAYTHEON COMPANY

Address (line 2) Bldg. E1, M.S. E150

Address (line 3) P.O. Box 902

Address (line 4) El Segundo, California 90245

**Pages**

Enter the total number of pages of the attached conveyance document including any attachments.

# 2

**Application Number(s) or Patent Number(s)**

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

**Patent Application Number(s)**

09/516,812

**Patent Number(s)**

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year

**Patent Cooperation Treaty (PCT)**

Enter PCT application number only if a U.S. Application Number has not been assigned.

PCT PCT PCT  
PCT PCT PCT

**Number of Properties**

Enter the total number of properties involved.

# 1

**Fee Amount**

Fee Amount for Properties Listed (37 CFR 3.41): \$ 40.00

Method of Payment:  
Deposit Account

Enclosed ☐

Deposit Account ☒

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number:

# 50-0616

Authorization to charge additional fees:

Yes ☒ No ☐

**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. Charges to deposit account are authorized, as indicated herein.

Colin M. Raufer, Reg. No. 40,781

Name of Person Signing

Colin M. Raufer

Signature

June 06, 2000

Date

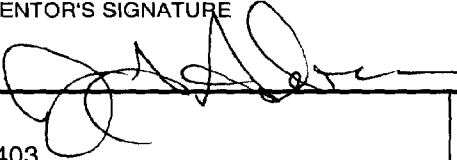
**ASSIGNMENT**Page 1 of 2  
PD-970480


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) **BROADBAND OPTICAL BEAM STEERING SYSTEM AND METHOD** for which application for Letters Patent of the United States has been executed by me on or before this day, or (if the following is completed) filed on March 1, 2000 as Serial No. 09/516,812; and

WHEREAS, RAYTHEON COMPANY, (hereinafter referred to as Raytheon), a Delaware Corporation, having its principal place of business in Lexington, Massachusetts, 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 my employer, 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 Commissioner of Patents and Trademarks 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 assignment, 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.

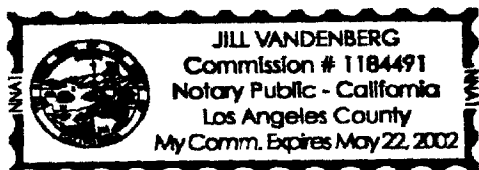
FULL NAME OF SOLE OR JOINT INVENTOR J. Steve Anderson	INVENTOR'S SIGNATURE 	DATE 6/6/00
RESIDENCE (CITY AND STATE) 847 Tenth Street, Santa Monica, California 90403		INVENTION AGREEMENT DATE November 12, 1979

FULL NAME OF SOLE OR JOINT INVENTOR Michael S. Pines	INVENTOR'S SIGNATURE 	DATE 6/6/00
RESIDENCE (CITY AND STATE) 11433 Chenault Street, Los Angeles, California 90049		INVENTION AGREEMENT DATE July 28, 1969

STATE OF California )  
COUNTY OF Los Angeles ) SS:  
On June 6, 2000 before me, Jill Vandenberg,  
a Notary Public in and for said State, personally appeared J. Steve Anderson and  
Michael S. Pines

☐ 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 