

07-19-2000



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

101407866

**RECORDATION FORM COVER SHEET
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09/593480
06/14/00

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

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

Second Party

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

09/593480

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)

City

State/Country

Zip Code

☐ 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

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Name

Address (line 1)

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07/14/2000 DNGUYEN 00000302 500888 09593480

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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: 010917 FRAME: 0214

Correspondent Name and Address

Area Code and Telephone Number **310-553-2400**

Name **Benman & Collins**

Address (line 1) **2049 Century Park East**

Address (line 2) **Suite 2740**

Address (line 3) **Los Angeles, CA 90067**

Address (line 4)

Pages

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

4

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)

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
02232000

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:

Enclosed ☐

Deposit Account ☒

Deposit Account

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

Deposit Account Number:

50-0888

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.

Andrew J. Rudd

Name of Person Signing

Signature

Date

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Patent and Trademark Office
PATENT

U.S. PTO
09/593480
06/14/00

Conveying Party(ies)

☒ Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) Baker, Robert M.

Execution Date
Month Day Year

05252000

Name (line 2)

Execution Date
Month Day Year

Name (line 1) Freeman, Stephen

02272000

Name (line 2)

Execution Date
Month Day Year

Name (line 1) Neary, Brian P.

05042000

Name (line 2)

Receiving Party(ies)

☐ Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

☐ 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.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City

State/Country

Zip Code

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

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Patent Application Number(s)

Patent Number(s)

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Patent and Trademark Office
PATENT

3636 U.S. PTO
09/593480
06/14/00

Conveying Party(ies)

☐ Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) Krzemien, Cynthia R.

Execution Date
Month Day Year

03202000

Name (line 2)

Execution Date
Month Day Year

04142000

Name (line 1) Krim, Jordan A.

Name (line 2)

Execution Date
Month Day Year

02252000

Name (line 1) Nunez, Luis R.

Name (line 2)

Receiving Party(ies)

☐ Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

☐ 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.)

Name (line 2)

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Patent Application Number(s)

Patent Number(s)

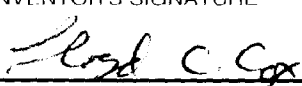
ASSIGNMENTPage 1 of 4
PD-99W189


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) **BEAMFORMING AND INTERFERENCE CANCELLATION SYSTEM USING GENERAL PURPOSE FILTER ARCHITECTURE** 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 _____ as Serial No. _____; 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;

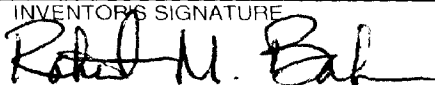
NOW, THEREFORE, in consideration of the obligations voluntarily assumed by me and set forth in an invention agreement between me and my employer, effective the date as stated below next to my name, and other good and valuable consideration, receipt of which is hereby acknowledged, I do hereby sell, assign 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 LLOYD C. COX	INVENTOR'S SIGNATURE 	DATE 2/23/00
RESIDENCE (CITY AND STATE) TUCSON, AZ		INVENTION AGREEMENT DATE

FULL NAME OF SOLE OR JOINT INVENTOR GARY A. GRAMLICH	INVENTOR'S SIGNATURE 	DATE 2/28/00
RESIDENCE (CITY AND STATE) ORO VALLEY, AZ		INVENTION AGREEMENT DATE

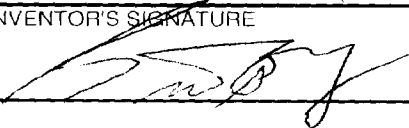
IN WITNESS WHEREOF, I have executed this instrument.


FULL NAME OF SOLE OR JOINT INVENTOR ROBERT M. BAKER	INVENTOR'S SIGNATURE 	DATE 5/25/00
RESIDENCE (CITY AND STATE) SIMI VALLEY, CA		INVENTION AGREEMENT DATE

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR STEPHEN FREEMAN	INVENTOR'S SIGNATURE 	DATE 2/27/00
RESIDENCE (CITY AND STATE) TUCSON, AZ		INVENTION AGREEMENT DATE

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR BRIAN P. NEARY	INVENTOR'S SIGNATURE 	DATE 2/7/00
RESIDENCE (CITY AND STATE) MARCELLUS, NY		INVENTION AGREEMENT DATE

FULL NAME OF SOLE OR JOINT INVENTOR CYNTHIA R. KRZEMIEN	INVENTOR'S SIGNATURE 	DATE 3/20/00
RESIDENCE (CITY AND STATE) TUCSON, AZ		INVENTION AGREEMENT DATE

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR JORDAN A. KRIM	INVENTOR'S SIGNATURE <i>Jordan A. Krim</i>	DATE 4/14/00
RESIDENCE (CITY AND STATE) LONGMONT, CO		INVENTION AGREEMENT DATE

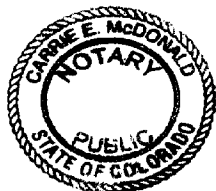
IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR LUIS R. NUNEZ	INVENTOR'S SIGNATURE <i>Luis R. Nunez</i>	DATE 2/25/00
RESIDENCE (CITY AND STATE) TUCSON, AZ		INVENTION AGREEMENT DATE

STATE OF Colorado)
COUNTY OF Boulder) SS:
On April 14 2000 before me, Came a Notary Public
a Notary Public in and for said State, personally appeared Jordan Krim
(Notary for Jordan Krim only) up

☐ 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.



My Commission Expires 11/18/2003

Notary Public *Carrie E. McDonald*

ASSIGNMENT

ADDENDUM
PD-99W189
Page 4 of 4

STATE OF New York)
COUNTY OF Oswego) SS: 092-640438

On May 4, 2000 before me, Brian P. Neary Sue K. MacDonald-Nans
a Notary Public in and for said State, personally appeared Brian P. Neary

☐ 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.

SUE K. MacDONALD-NANS
Notary Public, State of New York
Qual. in Oswego Co., No. 01MA5051910
My Commission Expires 11/13/2001

Notary Public

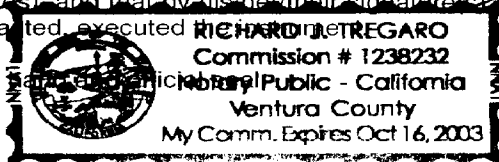
Sue K Mac Donal-Nans

STATE OF CALIFORNIA)
COUNTY OF VENTURA) SS:

On May 25, 2000 before me, RICHARD J TREGARO
a Notary Public in and for said State, personally appeared ROBERT M. BAKER

☒ 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

R. J. Tregaro

STATE OF _____)
COUNTY OF _____) SS:

On _____ before me, _____
a Notary Public in and for said State, personally appeared _____

☐ 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 _____